



**GOKUL  
GLOBAL  
UNIVERSITY**

Approved By Govt. of Gujarat  
(Recognized by UGC under Section 22 & 2(f) of 1956)  
(Gujarat Private State University Act 4 of 2018)

# **COURSE STRUCTURE**

## **Bachelor of Science Nursing**

### **Under Credit Structure**



**Faculty of Nursing**  
**Gokul Nursing College**



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## COURSES OF INSTRUCTION WITH CREDIT STRUCTURE

### Teaching Scheme

#### Semester-I

Subject Code	Subject Name	Teaching Scheme (Hours)			Credits
		Theory	Tutorial	Practical	
FNB110401	COMMUNICATIVE ENGLISH	40	0	0	2
FNB110402	APPLIED ANATOMY & APPLIED PHYSIOLOGY	120	0	0	6
FNB110403	APPLIED SOCIOLOGY & APPLIED PSYCHOLOGY	120	0	0	6
FNB110404	NURSING FOUNDATIONS I	120	80	160	10

#### Semester-II

Subject Code	Subject Name	Teaching Scheme (Hours)			Credits
		Theory	Tutorial	Practical	
FNB120401	APPLIED BIOCHEMISTRY & APPLIED NUTRITION & DIETETICS	100	0	0	5
FNB120402	NURSING FOUNDATIONS (I & II)	120	120	320	13
FNB120403	HEALTH/NURSING INFORMATICS & TECHNOLOGY	40	40	40	3

#### Semester-III

Subject Code	Subject Name	Teaching Scheme (Hours)			Credits
		Theory	Tutorial	Practical	
FNB130401	APPLIED MICROBIOLOGY AND INFECTION CONTROL INCLUDING SAFETY	40	40	0	3
FNB130402	PHARMACOLOGY I AND PATHOLOGY I	40	0	0	2
FNB130403	ADULT HEALTH NURSING- I	140	40	480	14





### **PROGRAMME OUTCOMES (POs)**

A student upon successful completion of Bachelor's degree in nursing should be able to

1. Assume responsibilities as professional, competent nurses and midwives in providing promotive, preventive, curative, and rehabilitative services.

2. Make independent decisions in nursing situations, protect the rights and facilitate Individuals and groups in pursuit of health, function in the hospital, community nursing services, and conduct research studies in the areas of nursing practice. They are also expected to assume the role of teacher, supervisor and manager in a clinical / public

health setting.





## **PROGRAMME SPECIFIC OUTCOMES (PSOs)**

1. Apply knowledge from physical, biological and behavioral sciences, medicine, including alternative systems and nursing in providing nursing care to individuals, families and communities.
2. Demonstrate understanding of life style and other factors, which affect health of individuals and groups.
3. Provide nursing care based on steps of nursing process in collaboration with the individuals and groups.
4. Demonstrate critical thinking skill in making decisions in all situations in order to provide quality care.
5. Utilise the latest trends and technology in providing health care.
6. Provide promotive, preventive and restorative health services in line with the national health policies and programs.
7. Practice within the framework of code of ethics and professional conduct and acceptable standards of practice within the legal boundaries.
8. Communicate effectively with individuals and groups and members of the health team in order to promote effective interpersonal relationships and teamwork.
9. Demonstrate skills in teaching to individuals and groups in clinical/ community health settings.
10. Participate effectively as members of the health team in health care delivery system.
11. Demonstrate leadership and managerial skills in clinical / community health settings.
12. Conduct need based research studies in various settings and utilize the research findings to improve the quality of care.
13. Demonstrate awareness, interest and contribute towards advancement of self and of the profession





## SYLLABUS

### FNB110401-COMMUNICATIVE ENGLISH

#### PLACEMENT: I SEMESTER

#### THEORY: 2 Credits (40 hours)

**DESCRIPTION:** The course is designed to enable students to enhance their ability to speak and write the language (and use English) required for effective communication in their professional work. Students will practice their skills in verbal and written English during clinical and classroom experience.

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

1. Identify the significance of Communicative English for healthcare professionals.
2. Apply the concepts and principles of English Language use in professional development such as pronunciation, vocabulary, grammar, paraphrasing, voice modulation, Spelling, pause and silence.
3. Demonstrate attentive listening in different hypothetical situations.
4. Converse effectively, appropriately and timely within the given context and the individual or team they are communicating with either face to face or by other means.
5. Read, interpret and comprehend content in text, flow sheet, framework, figures, tables, reports, anecdotes etc.
6. Analyse the situation and apply critical thinking strategies.
7. Enhance expressions through writing skills.
8. Apply LSRW (Listening, Speaking, Reading and Writing) Skill in combination to learn, teach, educate and share information, ideas and results.





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
I	3(T)	Identify the significance of communicative English	<b>Communication</b> <ul style="list-style-type: none"> <li>• What is communication?</li> <li>• What are communication roles of listeners, speakers, readers and writers as healthcare professionals?</li> </ul>	<ul style="list-style-type: none"> <li>• Definitions with examples, illustrations and explanations</li> <li>• Identifying competencies/communicative strategies in LSRW</li> <li>• Reading excerpt on the above and interpreting them through tasks</li> </ul>	<ul style="list-style-type: none"> <li>• Checking for understanding through tasks</li> </ul>
II	5(T)	Describe concepts and principles of Language (English) use in professional development such as pronunciation, vocabulary, grammar, paraphrasing, voice modulation, spelling, pause and silence	<b>Introduction to LSRGW</b> <ul style="list-style-type: none"> <li>• L – Listening: Different types of listening</li> <li>• S – Speaking: Understanding Consonants, Vowels, Word and Sentence Stress, Intonation</li> <li>• R – Reading: Medical vocabulary,</li> <li>• Gr – Grammar: Understanding tenses, linkers</li> <li>• W – Writing simple sentences and short paragraphs – emphasis on correct grammar</li> </ul>	<ul style="list-style-type: none"> <li>• Exercises on listening to news, announcements, telephone conversations and instructions from others</li> <li>• Information on fundamentals of Speech – Consonant, Vowel, Stress and Intonation with tasks based on these through audio/video and texts</li> <li>• Reading a medical dictionary/glossary of medical terms with matching exercises</li> <li>• Information on tenses and basic concepts of correct grammar through fill in the blanks, true/false questions</li> </ul>	<ul style="list-style-type: none"> <li>• Through ‘check your understanding’ exercises</li> </ul>





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
III	5(T)	Demonstrate attentive listening in different hypothetical situations	<p><b>Attentive Listening</b></p> <ul style="list-style-type: none"> <li>Focusing on listening in different situations – announcements, descriptions, narratives, instructions, discussions, demonstrations</li> <li>Reproducing Verbatim</li> <li>Listening to academic talks/lectures</li> <li>Listening to presentation</li> </ul>	<ul style="list-style-type: none"> <li>Listening to announcements, news, documentaries with tasks based on listening</li> <li>With multiple choice, Yes/No and fill in the blank activities</li> </ul>	<ul style="list-style-type: none"> <li>Checking individually against correct answers</li> <li>Listening for specific information</li> <li>Listening for overall meaning and instructions</li> <li>Listening to attitudes and opinions</li> <li>Listening to audio, video and identify keypoints</li> </ul>
IV	9(T)	Converse effectively, appropriately and timely within the given context and the individual or team they are communicating with either face to face or other means	<p><b>Speaking–Effective Conversation</b></p> <ul style="list-style-type: none"> <li>Conversations situations – informal, formal and neutral</li> <li>Factors influencing way of speaking – setting, topic, social relationship, attitude and language</li> <li>Greetings, introductions, requesting, asking for and giving permission, speaking personally and casual conversations</li> <li>Asking for information, giving instructions and directions</li> <li>Agreeing and disagreeing, giving opinions</li> <li>Describing people, places, events and things, narrating, reporting &amp; reaching conclusions</li> <li>Evaluating and comparing</li> <li>Complaints and suggestions</li> <li>Telephone conversations</li> <li>Delivering presentations</li> </ul>	<ul style="list-style-type: none"> <li>Different types of speaking activities related to the content</li> <li>Guided with prompts and free discussions</li> <li>Presentation techniques</li> <li>Talking to peers and other adults.</li> <li>Talking to patients and Patient attenders</li> <li>Talking to other healthcare professionals</li> <li>Classroom conversation</li> <li>Scenario based learning tasks</li> </ul>	<ul style="list-style-type: none"> <li>Individual and group/peer assessment through livespeaking tests</li> <li>Presentation of situation in emergency and routine</li> <li>Handoff</li> <li>Reporting in doctors/nurses' rounds</li> <li>Case presentation</li> <li>Facet of face or a communication</li> <li>Speaking individually (Nurse to nurse/patient/doctor) and together in the group</li> <li>Telephonic talking</li> </ul>





V	5(T)	Read, interpret and comprehend content in text, flow sheet, framework, figures, tables, reports, and notes	<ul style="list-style-type: none"> <li>• <b>Reading</b></li> <li>• Reading strategies, reading notes and messages</li> <li>• Reading relevant articles and news items</li> <li>• Vocabulary for everyday activities, abbreviations and medical vocabulary</li> <li>• Understanding visuals, graphs, figures and notes on instructions</li> <li>• Reading reports and interpreting them</li> <li>• Using idioms and phrases, spotting errors, vocabulary for presentations</li> <li>• Remedial Grammar</li> </ul>	<ul style="list-style-type: none"> <li>• Detailed tasks and exercises on reading for information, inference and evaluation</li> <li>• Vocabulary games and puzzles for medical lexis</li> <li>• Grammar activities</li> </ul>	<ul style="list-style-type: none"> <li>• Reading/summarizing/justifying answers orally</li> <li>• Patient document</li> <li>• Doctor's prescription of care</li> <li>• Journal/news reading and interpretation</li> <li>• Notes/Reports</li> </ul>
VI	5(T)	Enhance expression through writing skills	<ul style="list-style-type: none"> <li>• <b>Writing Skills</b></li> <li>• Writing patient history</li> <li>• Note taking</li> <li>• Summarising</li> <li>• Anecdotal records</li> <li>• Letter writing</li> <li>• Diary/Journal writing</li> <li>• Report writing</li> <li>• Paper writing skills</li> <li>• Abstract writing</li> </ul>	<ul style="list-style-type: none"> <li>• Writing tasks with focus on task fulfilment, coherence and cohesion, appropriate vocabulary and correct grammar</li> <li>• Guided and free tasks</li> <li>• Different kinds of letter writing tasks</li> </ul>	<ul style="list-style-type: none"> <li>• Paper based assessment by the teacher/trainer against set band descriptors</li> <li>• Presentation of situation</li> <li>• Documentation</li> <li>• Report writing</li> <li>• Paper writing skills</li> <li>• Verbatim producing</li> <li>• Letter writing</li> <li>• Resume/CV</li> </ul>
VII	8(T)	Apply LSRW skill in combination to learn, teach, educate and share information, ideas and results	<ul style="list-style-type: none"> <li>• <b>LSRW Skills</b></li> <li>• Critical thinking strategies for listening and reading</li> <li>• Oral reports, presentations</li> <li>• Writing instructions, letters and reports</li> <li>• Error analysis regarding LSRW</li> </ul>	<ul style="list-style-type: none"> <li>• Valuating different options/multiple answers and interpreting decisions through situational activities</li> <li>• Demonstration – individually and in groups</li> <li>• Group Discussion</li> <li>• Presentation</li> <li>• Role Play</li> <li>• Writing reports</li> </ul>	<ul style="list-style-type: none"> <li>• Consolidated assessment orally and through written tasks/exercises</li> </ul>





Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1,Pos-2/Psos-1-Psos-13
COs 2	Pos-1,Pos-2/Psos-1-Psos-13
Cos 3	Pos-1,Pos-2/Psos-1-Psos-13
COs 4	Pos-1,Pos-2/Psos-1-Psos-13
COs 5	Pos-1,Pos-2/Psos-1-Psos-13
COs 6	Pos-1,Pos-2/Psos-1-Psos-13
COs 7	Pos-1,Pos-2/Psos-1-Psos-13
COs 8	Pos-1,Pos-2/Psos-1-Psos-13

#### Reference Books-

1. Sidhu, “An Intensive Course in English – A remedial Work book”, Orient Longman Publication
2. R C Jain, “English Grammar and Composition”, Mac Milan Publication.





## **FNB110402- APPLIED ANATOMY**

**PLACEMENT: I SEMESTER**

**THEORY: 3 Credits (60 hours)**

**DESCRIPTION:** The course is designed to assist student to recall and further 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.





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	8(T)	<p>Define the terms relative to the anatomical position</p> <p>Describe the anatomical planes</p> <p>Define and describe the terms used to describe movements</p> <p>Organization of human body and structure of cell, tissues, membranes and glands</p> <p>Describe the types of cartilage</p> <p>Compare and contrast the features of skeletal, smooth and cardiac muscle</p>	<p><b>Introduction to anatomical terms and organization of the human body</b></p> <ul style="list-style-type: none"> <li>Introduction to anatomical terms relative to position – anterior, ventral, posterior/dorsal, superior, inferior, median, lateral, proximal, distal, superficial, deep, prone, supine, palmar and plantar</li> <li>Anatomical planes (axial/transverse/horizontal, sagittal/vertical plane and coronal/frontal/oblique plane)</li> <li>Movements (flexion, extension, abduction, adduction, medial rotation, lateral rotation, inversion, eversion, supination, pronation, plantar flexion, dorsal flexion and circumduction)</li> <li>Cell structure, Cell division</li> <li>Tissue – definition, types, characteristics, classification, location</li> <li>Membrane, glands – classification and structure</li> <li>Identify major surface and bony landmarks in each body region, Organization of human body</li> <li>Hyaline, fibrocartilage, elastic cartilage</li> <li>Features of skeletal, smooth and cardiac muscle</li> <li>Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>Lecture cum Discussion</li> <li>Use of models</li> <li>Videodemonstration</li> <li>Use of microscopes/slides</li> <li>Lecture cum Discussion</li> <li>Video/Slides</li> <li>Anatomical Torso</li> </ul>	<ul style="list-style-type: none"> <li>Quiz</li> <li>MCQ</li> <li>Short answer</li> </ul>
Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods





<b>II</b>	6(T)	Describe the structure of respiratory system  Identify the muscles of respiration and examine their contribution to the mechanism of breathing	<b>The Respiratory system</b> <ul style="list-style-type: none"> <li>• Structure of the organs of respiration</li> <li>• Muscles of respiration</li> <li>• Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Models</li> <li>• Video/Slides</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>
<b>IV</b>	6(T)	Describe the structure of circulatory and lymphatic system.	<b>The Circulatory and Lymphatic system</b> <ul style="list-style-type: none"> <li>• Structure of blood components, blood vessels – Arterial and Venous system</li> <li>• Position of heart relative to the associated structures</li> <li>• Chambers of heart, layers of heart</li> <li>• Heart valves, coronary arteries</li> <li>• Nerve and blood supply to heart</li> <li>• Lymphatic tissue</li> <li>• Veins used for IV injections</li> <li>• Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Models</li> <li>• Video/Slides</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• MCQ</li> </ul>
<b>V</b>	4(T)	Identify the major endocrine glands and describe the structure of endocrine glands	<b>The Endocrine system</b> <ul style="list-style-type: none"> <li>• Structure of Hypothalamus, Pineal Gland, Pituitary gland, Thyroid, Parathyroid, Thymus, Pancreas and Adrenal glands</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Models/charts</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>
<b>VI</b>	4(T)	Describe the structure of various sensory organs	<b>The Sensory organs</b> <ul style="list-style-type: none"> <li>• Structure of skin, eye, ear, nose and tongue</li> <li>• Application and implications in nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Explain with Video/models/charts</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• MCQ</li> </ul>

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
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<b>VII</b>	10(T)	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  Apply the knowledge in performing nursing procedures/skills	<p><b>The Musculoskeletal system:</b></p> <p><b>The Skeletal system</b></p> <ul style="list-style-type: none"> <li>Anatomical positions</li> <li>Bones – types, structure, growth and ossification</li> <li>Axial and appendicular skeleton</li> <li>Joints – classification, major joints and structure</li> <li>Application and implications in nursing</li> </ul> <p><b>The Muscular system</b></p> <ul style="list-style-type: none"> <li>Types and structure of muscles</li> <li>Muscle groups – muscles of the head, neck, thorax, abdomen, pelvis, upper limb and lower limbs</li> <li>Principal muscles – deltoid, biceps, triceps, respiratory, abdominal, pelvic floor, pelvic floor muscles, gluteal muscles and vastus lateralis</li> </ul> <p>Major muscles involved in nursing procedures</p>	<ul style="list-style-type: none"> <li>Review – discussion</li> <li>Lecture</li> <li>Discussions</li> <li>Explain using charts, skeleton and loose bones and torsos</li> <li>Identifying muscles involved in nursing procedures in lab</li> </ul>	<ul style="list-style-type: none"> <li>Short answer</li> <li>Objective type</li> </ul>
<b>VIII</b>	5(T)	Describe the structure of renal system	<p><b>The Renal system</b></p> <ul style="list-style-type: none"> <li>Structure of kidney, ureters, bladder, urethra</li> <li>Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Models/charts</li> </ul>	<ul style="list-style-type: none"> <li>MCQ</li> <li>Short answer</li> </ul>
<b>IX</b>	5(T)	Describe the structure of reproductive system	<p><b>The Reproductive system</b></p> <ul style="list-style-type: none"> <li>Structure of male reproductive organs</li> <li>Structure of female reproductive organs</li> <li>Structure of breast</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Models/charts</li> </ul>	<ul style="list-style-type: none"> <li>MCQ</li> <li>Short answer</li> </ul>
<b>X</b>	6(T)	Describe the structure of nervous system including the distribution of the nerves, nerve plexuses  Describe the ventricular system	<p><b>The Nervous system</b></p> <ul style="list-style-type: none"> <li>Review Structure of neurons</li> <li>CNS, ANS and PNS (Central, autonomic and peripheral)</li> <li>Structure of brain, spinal cord, cranial nerves, spinal nerves, peripheral nerves, functional areas of cerebral cortex</li> <li>Ventricular system – formation, circulation, and drainage</li> <li>Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Explain with models</li> <li>Videoslides</li> </ul>	<ul style="list-style-type: none"> <li>MCQ</li> <li>Short answer</li> </ul>





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Cos 3	Pos-1,Pos-2/Psos-1-Psos-13
COs 4	Pos-1,Pos-2/Psos-1-Psos-13
COs 5	Pos-1,Pos-2/Psos-1-Psos-13

**Reference Books:**

1. Chaurasia B. D , “ Human Anatomy “ , vol 1-5 CBS Publishers
2. Jackson Sheils, “Anatomy and Physiology for Nurses “, Prism Books Pvt Ltd , Bangalore, 9 th Edition

**FNB110402- APPLIED PHYSIOLOGY**



**Faculty of Nursing  
Gokul Nursing College**





**PLACEMENT: I SEMESTER**

**THEORY: 3 Credits (60 hours)**

**DESCRIPTION:** The course is designed to assist 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.

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
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I	4(T)	Describe the physiology of cell, tissues, membranes and glands	<p><b>General Physiology–Basic concepts</b></p> <ul style="list-style-type: none"> <li>• Cell physiology including transportation across cell membrane</li> <li>• Body fluid compartments, Distribution of total body fluid, intracellular and extracellular compartments, major electrolytes and maintenance of homeostasis</li> <li>• Cell cycle</li> <li>• Tissue–formation, repair</li> <li>• Membranes and glands –functions</li> <li>• Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Review–discussion</li> <li>• Lecture cum Discussion</li> <li>• Videodemonstrations</li> </ul>	<ul style="list-style-type: none"> <li>• Quiz</li> <li>• MCQ</li> <li>• Short answer</li> </ul>
II	6(T)	<p>Describe the physiology and mechanism of respiration</p> <p>Identify the muscles of respiration and examine their contribution to the mechanism of breathing</p>	<p><b>Respiratory system</b></p> <ul style="list-style-type: none"> <li>• Functions of respiratory organs</li> <li>• Physiology of respiration</li> <li>• Pulmonary circulation–functional features</li> <li>• Pulmonary ventilation, exchange of gases</li> <li>• Carriage of oxygen and carbon-dioxide, Exchange of gases in tissue</li> <li>• Regulation of respiration</li> <li>• Hypoxia, cyanosis, dyspnea, periodic breathing</li> <li>• Respiratory changes during exercise</li> <li>• Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Videoslides</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• MCQ</li> </ul>
III	8(T)	Describe the functions of digestive system	<p><b>Digestive system</b></p> <ul style="list-style-type: none"> <li>• Functions of the organs of digestive tract</li> <li>• Saliva–composition, regulation of secretion and functions of saliva</li> <li>• Composition and function of gastric juice, mechanism and regulation of gastric secretion</li> <li>• Composition of pancreatic juice, function, regulation of pancreatic secretion</li> <li>• Functions of liver, gall bladder and pancreas</li> <li>• Composition of bile and function</li> <li>• Secretion and function of small and large intestine</li> <li>• Movements of alimentary tract</li> <li>• Digestion in mouth, stomach, small intestine, large intestine, absorption of food</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Videoslides</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• MCQ</li> </ul>





III	8(T)	Describe the functions of digestive system	<p><b>Digestive system</b></p> <ul style="list-style-type: none"> <li>• Functions of the organs of digestive tract</li> <li>• Saliva – composition, regulation of secretion and functions of saliva</li> <li>• Composition and function of gastric juice, mechanism and regulation of gastric secretion</li> <li>• Composition of pancreatic juice, function, regulation of pancreatic secretion</li> <li>• Functions of liver, gall bladder and pancreas</li> <li>• Composition of bile and function</li> <li>• Secretion and function of small and large intestine</li> <li>• Movements of alimentary tract</li> <li>• Digestion in mouth, stomach, small intestine, large intestine, absorption of food</li> <li>• Application and implications in nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Video slides</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• MCQ</li> </ul>
IV	6(T)	Explain the functions of the heart, and physiology of circulation	<p><b>Circulatory and Lymphatic system</b></p> <ul style="list-style-type: none"> <li>• Functions of heart, conduction system, cardiac cycle, Stroke volume and cardiac output</li> <li>• Blood pressure and Pulse</li> <li>• Circulation – principles, factors influencing blood pressure, pulse</li> <li>• Coronary circulation, Pulmonary and systemic circulation</li> <li>• Heart rate – regulation of heart rate</li> <li>• Normal value and variations</li> <li>• Cardiovascular homeostasis in exercise and posture</li> <li>• Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Video/Slides</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• MCQ</li> </ul>
V	5(T)	Describe the composition and functions of blood	<p><b>Blood</b></p> <ul style="list-style-type: none"> <li>• Blood – Functions, Physical characteristics</li> <li>• Formation of blood cells</li> <li>• Erythropoiesis – Functions of RBC, RBC life cycle</li> <li>• WBC – types, functions</li> <li>• Platelets – Function and production of platelets</li> <li>• Clotting mechanism of blood, clotting time, bleeding time, PTT</li> <li>• Hemostasis –</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Videos</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• MCQ</li> </ul>





			<p>role of vasoconstriction, platelet plug formation in hemostasis, coagulation factors, intrinsic and extrinsic pathways of coagulation</p> <ul style="list-style-type: none"> <li>• Blood groups and types</li> <li>• Functions of reticuloendothelial system, immunity</li> <li>• Application in nursing</li> </ul>		
<b>VI</b>	5(T)	Identify the major endocrine glands and describe their functions	<p><b>The Endocrine system</b></p> <ul style="list-style-type: none"> <li>• Functions and hormones of Pineal Gland, Pituitary gland, Thyroid, Parathyroid, Thymus, Pancreas and Adrenal glands.</li> <li>• Other hormones</li> <li>• Alterations in disease</li> <li>• Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Explaining charts</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• MCQ</li> </ul>
<b>VII</b>	4(T)	Describe the structure of various sensory organs	<p><b>The Sensory Organs</b></p> <ul style="list-style-type: none"> <li>• Functions of skin</li> <li>• Vision, hearing, taste and smell</li> <li>• Errors of refraction, aging changes</li> <li>• Application and implications in nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Video</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• MCQ</li> </ul>
<b>VIII</b>	6(T)	Describe the functions of bones, joints, various types of muscles, its special properties and nerves supplying them	<p><b>Musculoskeletal system</b></p> <p>Bones – Functions, movements of bones of axial and appendicular skeleton, Bone healing</p> <ul style="list-style-type: none"> <li>• Joints and joint movements</li> <li>• Alteration of joint disease</li> <li>• Properties and Functions of skeletal muscles – mechanism of muscle contraction</li> <li>• Structure and properties of cardiac muscles and smooth muscles</li> <li>• Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Video presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Structured essay</li> <li>• Short answer</li> <li>• MCQ</li> </ul>
<b>IX</b>	4(T)	Describe the physiology of renal system	<p><b>Renal system</b></p> <ul style="list-style-type: none"> <li>• Functions of kidney in maintaining homeostasis</li> <li>• GFR</li> <li>• Functions of ureters, bladder and urethra</li> <li>• Micturition</li> <li>• Regulation of renal function</li> <li>• Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Charts and models</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• MCQ</li> </ul>





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
X	4(T)	Describe the structure of reproductive system	<p><b>The Reproductive system</b></p> <ul style="list-style-type: none"> <li>Female reproductive system – Menstrual cycle, function and hormones of ovary, oogenesis, fertilization, implantation, Functions of breast</li> <li>Male reproductive system – Spermatogenesis, hormones and its functions, semen</li> <li>Application and implication in providing nursing care</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Explain using charts, models, specimens</li> </ul>	<ul style="list-style-type: none"> <li>Short answer</li> <li>MCQ</li> </ul>
XI	8(T)	Describe the functions of brain, physiology of nerve stimulus, reflexes, cranial and spinal nerves	<p><b>Nervous system</b></p> <ul style="list-style-type: none"> <li>Overview of nervous system</li> <li>Review of types, structure and functions of neurons</li> <li>Nerve impulse</li> <li>Review functions of Brain – Medulla, Pons, Cerebrum, Cerebellum</li> <li>Sensory and Motor Nervous system</li> <li>Peripheral Nervous system</li> <li>Autonomic Nervous system</li> <li>Limbic system and higher mental functions – Hippocampus, Thalamus, Hypothalamus</li> <li>Vestibular apparatus</li> <li>Functions of cranial nerves</li> <li>Autonomic functions</li> <li>Physiology of Pain – somatic, visceral and referred</li> <li>Reflexes</li> <li>CSF formation, composition, circulation of CSF, blood brain barrier and blood CSF barrier</li> <li>Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>Lecture cum Discussion</li> <li>Videoslides</li> </ul>	<ul style="list-style-type: none"> <li>Brief structured essays</li> <li>Short answer</li> <li>MCQ</li> <li>Critical reflection</li> </ul>





Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1,Pos-2/Psos-1-Psos-13
COs 2	Pos-1,Pos-2/Psos-1-Psos-13
Cos 3	Pos-1,Pos-2/Psos-1-Psos-13
COs 4	Pos-1,Pos-2/Psos-1-Psos-13
COs 5	Pos-1,Pos-2/Psos-1-Psos-13

#### Reference Books:

1. Chaurasia B. D , “ Human Physiology “ , vol 1-5 CBS Publishers
2. Jackson Sheils, “Anatomy and Physiology for Nurses “, Prism Books Pvt Ltd , Bangalore, 9 th Edition
3. Boris Sergeev, “Physiology in Health and Illness”, 7th edition





## **FNB110403- APPLIED SOICIOLOGY**

**PLACEMENT: I SEMESTER**

**THEORY: 3 Credits (60 hours)**

**DESCRIPTION:** This course is designed to enable the students to develop understanding about basic concepts of sociology and its application in personal and community life, health, illness and nursing.

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

1. Identify the scope and significance of sociology in nursing.
2. Apply the knowledge of social structure and different culture in a society in identifying social needs of sick clients.
3. Identify the impact of culture on health and illness.
4. Develop understanding about types of family, marriage and its legislation.
5. Identify different types of caste, class, social change and its influence on health and health practices.
6. Develop understanding about social organization and disorganization and social problems in India.
7. Integrate the knowledge of clinical sociology and its uses in crisis intervention.





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	1(T)	Describe the scope and significance of sociology in nursing	<b>Introduction</b> <ul style="list-style-type: none"> <li>• Definition, nature and scope of sociology</li> <li>• Significance of sociology in nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> </ul>
II	15(T)	Describe the individualization, Groups, processes of Socialization, social change and its importance	<b>Social structure</b> <ul style="list-style-type: none"> <li>• Basic concept of society, community, association and institution</li> <li>• Individual and society</li> <li>• Personal disorganization</li> <li>• Social group – meaning, characteristics, and classification.</li> <li>• Social processes – definition and forms, Cooperation, competition, conflict, accommodation, assimilation, isolation</li> <li>• Socialization – characteristics, process, agencies of socialization</li> <li>• Social change – nature, process, and role of nurse</li> <li>• Structure and characteristics of urban, rural and tribal communities.</li> <li>• Major health problems in urban, rural and tribal communities</li> <li>• Importance of social structure in nursing profession</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>
III	8(T)	Describe culture and its impact on health and disease	<b>Culture</b> <ul style="list-style-type: none"> <li>• Nature, characteristic and evolution of culture</li> <li>• Diversity and uniformity of culture</li> <li>• Difference between culture and civilization</li> <li>• Culture and socialization</li> <li>• Transcultural society</li> <li>• Culture, Modernization and its impact on health and disease</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Panel discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> </ul>





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
IV	8(T)	Explain family, marriage and legislation related to marriage	<b>Family and Marriage</b> <ul style="list-style-type: none"> <li>Family – characteristics, basic need, types and functions of family</li> <li>Marriage – forms of marriage, social custom relating to marriage and importance of marriage</li> <li>Legislation on Indian marriage and family.</li> <li>Influence of marriage and family on health and health practices</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> </ul>	<ul style="list-style-type: none"> <li>Essay</li> <li>Short answer</li> <li>Case study report</li> </ul>
V	8(T)	Explain different types of caste and classes in society and its influence on health	<b>Social Stratification</b> <ul style="list-style-type: none"> <li>Introduction – Characteristics &amp; forms of stratification</li> <li>Function of stratification</li> <li>Indian caste system – origin and characteristics</li> <li>Positive and negative impact of caste in society.</li> <li>Class system and status</li> <li>Social mobility – meaning and types</li> <li>Race – concept, criteria of racial classification</li> <li>Influence of class, caste and race system on health.</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Panel discussion</li> </ul>	<ul style="list-style-type: none"> <li>Essay</li> <li>Short answer</li> <li>Objective type</li> </ul>
VI	15(T)	Explain social organization, disorganization, social problems and role of nurse in reducing social problems	<b>Social organization and disorganization</b> <ul style="list-style-type: none"> <li>Social organization – meaning, elements and types</li> <li>Voluntary associations</li> <li>Social system – definition, types, role and status as structural element of social system</li> <li>Interrelationship of institutions</li> <li>Social control – meaning, aims and process of social control</li> <li>Social norms, moral and values</li> <li>Social disorganization – definition, causes, Control and planning</li> <li>Major social problems – poverty, housing, food supplies, illiteracy, prostitution, dowry, Child labour, child abuse, delinquency, crime, substance abuse, HIV/AIDS, COVID-19</li> <li>Vulnerable group – elderly, handicapped, minority and other marginal group.</li> <li>Fundamental rights of individual, women and children</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Group discussion</li> <li>Observational visit</li> </ul>	<ul style="list-style-type: none"> <li>Essay</li> <li>Short answer</li> <li>Objective type</li> <li>Visit report</li> </ul>





			<ul style="list-style-type: none"> <li>• Role of nurse in reducing social problems and enhancing coping</li> <li>• Social welfare programs in India</li> </ul>		
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Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
VII	5(T)	Explain clinical sociology and its application in the hospital and community	<b>Clinical sociology</b> <ul style="list-style-type: none"> <li>• Introduction to clinical sociology</li> <li>• Sociological strategies for developing services for the abused</li> <li>• Use of clinical sociology in crisis intervention</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture,</li> <li>• Group discussion</li> <li>• Roleplay</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> </ul>

Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1, Pos-2/ Psos-1- Psos-13
COs 2	Pos-1, Pos-2/ Psos-1- Psos-13
COs 3	Pos-1, Pos-2/ Psos-1- Psos-13
COs 4	Pos-1, Pos-2/ Psos-1- Psos-13
COs 5	Pos-1, Pos-2/ Psos-1- Psos-13
COs 6	Pos-1, Pos-2/ Psos-1- Psos-13
COs 7	Pos-1, Pos-2/ Psos-1- Psos-13

### Reference Books:

1. Dr. Rebecca Shailesh Jadhav, Textbooks of Applied Sociology, Jain publications, 1<sup>st</sup> edition, 2022
2. Prem sharma, Applied Sociology, Lotus publications, 1<sup>st</sup> edition, 2022





## **FNB110403-APPLIED PSYCHOLOGY**

**PLACEMENT: I SEMESTER**

**THEORY: 3 Credits (60 Hours)**

**DESCRIPTION:** This course is designed to enable the students to develop understanding about basic concepts of psychology and its application in personal and community life, health, illness and nursing. It further provides students opportunity to recognize the significance and application of soft skills and self-empowerment in the practice of nursing.

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

1. Identify the importance of psychology in individual and professional life.
2. Develop understanding of the biological and psychological basis of human behaviour.
3. Identify the role of nurse in promoting mental health and dealing with altered personality.
4. Perform the role of nurses applicable to the psychology of different age groups.
5. Identify the cognitive and affective needs of clients.
6. Integrate the principles of motivation and emotion in performing the role of nurse in caring for emotionally sick client.
7. Demonstrate basic understanding of psychological assessment and nurse's role.
8. Apply the knowledge of soft skills in workplace and society.
9. Apply the knowledge of self-empowerment in workplace, society and personal life.





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	2(T)	Describe scope, branches and significance of psychology in nursing	<b>Introduction</b> <ul style="list-style-type: none"> <li>• Meaning of Psychology               <ul style="list-style-type: none"> <li>• Development of psychology – Scope, branches and methods of psychology</li> </ul> </li> <li>• Relationship with other subjects               <ul style="list-style-type: none"> <li>• Significance of psychology in nursing</li> </ul> </li> <li>• Applied psychology to solve everyday issues</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> </ul>
II	4(T)	Describe biology of human behaviour	<b>Biological basis of behavior – Introduction</b> <ul style="list-style-type: none"> <li>• Body mind relationship</li> <li>• Genetics and behaviour</li> <li>• Inheritance of behaviour</li> <li>• Brain and behaviour.</li> <li>• Psychology and sensation – sensory process – normal and abnormal</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> </ul>
III	5(T)	Describe mentally healthy person and defense mechanisms	<b>Mental health and mental hygiene</b> <ul style="list-style-type: none"> <li>• Concept of mental health and mental hygiene</li> <li>• Characteristic of mentally healthy person</li> <li>• Warning signs of poor mental health</li> <li>• Promotive and preventive mental health strategies and services</li> <li>• Defense mechanism and its implication</li> <li>• Frustration and conflict – types of conflicts and measurement to overcome</li> <li>• Role of nurse in reducing frustration and conflict and enhancing coping</li> <li>• Dealing with ego</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Case discussion</li> <li>• Roleplay</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>





IV	7(T)	Describe psychology of people in different age groups and role of nurse	<p><b>Developmental psychology</b></p> <ul style="list-style-type: none"> <li>Physical, psychosocial and cognitive development across life span – Prenatal through early childhood, middle to late childhood through adolescence, early and mid-adulthood, late adulthood, death and dying</li> <li>Role of nurse in supporting normal growth and development across the lifespan</li> <li>Psychological needs of various groups in health and sickness – Infancy, childhood, adolescence, adulthood and old age</li> <li>Introduction to child psychology and role of nurse in meeting the psychological needs of CHILDREN.</li> <li>Psychology of vulnerable individuals – challenged, women, sick etc.</li> <li>Role of nurse with vulnerable groups</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Group</li> <li>discussion</li> </ul>	<ul style="list-style-type: none"> <li>Essay</li> <li>Short answer</li> </ul>
V	4(T)	Explain personality and role of nurse in identification and improvement in altered personality	<p><b>Personality</b></p> <ul style="list-style-type: none"> <li>Meaning, definition of personality</li> <li>Classification of personality</li> <li>Measurement and evaluation of personality – Introduction</li> <li>Alteration in personality</li> <li>Role of nurse in identification of individual personality and improvement in altered personality</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> <li>Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>Essay and short answer</li> <li>Objective type</li> </ul>
VI	16(T)	Explain cognitive process and their applications	<p><b>Cognitive process</b></p> <ul style="list-style-type: none"> <li><b>Attention</b> – definition, types, determinants, duration, degree and alteration in attention</li> <li><b>Perception</b> – Meaning of Perception, principles, factors affecting perception,</li> <li><b>Intelligence</b> – Meaning of intelligence – Effect of heredity and environment in intelligence, classification, Introduction to measurement of intelligence tests – Mental deficiencies</li> <li><b>Learning</b> – Definition of learning, types of learning, Factors influencing learning – Learning process, Habit formation</li> <li><b>Memory</b> – meaning and nature of memory, factors influencing memory, methods to improve memory,</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> </ul>	<ul style="list-style-type: none"> <li>Essay and short answer</li> <li>Objective type</li> </ul>





			<p>forgetting</p> <ul style="list-style-type: none"> <li>• <b>Thinking</b> – types, level, reasoning and problemsolving.</li> <li>• <b>Aptitude</b> – concept, types, individual differences and variability</li> <li>• Psychometric assessment of cognitive processes – Introduction</li> <li>• Alteration in cognitive processes</li> </ul>		
<b>VII</b>	6(T)	Describe motivation, emotion, attitude and role of nurse in emotionally sick client	<p><b>Motivation and emotional processes</b></p> <ul style="list-style-type: none"> <li>• <b>Motivation</b> – meaning, concept, types, theories of motivation, motivation cycle, biological and special motives</li> <li>• <b>Emotions</b> – Meaning of emotions, development of emotions, alteration of emotion, emotions in sickness – handling emotions in self and other</li> <li>• Stress and adaptation – stress, stressor, cycle, effect, adaptation and coping</li> <li>• <b>Attitudes</b> – Meaning of attitudes, nature, factor affecting attitude, attitudinal change, Role of attitude in health and sickness</li> <li>• Psychometric assessment of emotions and attitude – Introduction</li> <li>• Role of nurse in caring for emotionally sick client</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Essay and short answer</li> <li>• Objectivity type</li> </ul>
<b>VIII</b>	4(T)	Explain psychological assessment and test and role of nurse	<p><b>Psychological assessment and tests – introduction</b></p> <ul style="list-style-type: none"> <li>• Types, development, characteristics, principles, uses, interpretation</li> <li>• Role of nurse in psychological assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Assessment of practice</li> </ul>
<b>IX</b>	10(T)	Explain concept of soft skill and its application in workplace and society	<p><b>Application of soft skill</b></p> <ul style="list-style-type: none"> <li>• Concept of soft skill</li> <li>• Types of soft skill – visual, aural and communication skill</li> <li>• The way of communication</li> <li>• Building relationship with client and society</li> <li>• <b>Interpersonal Relationships (IPR):</b> Definition, Types, and Purposes, Interpersonal skills, Barriers, Strategies to overcome barriers</li> <li>• Survival strategies –</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Group discussion</li> <li>• Roleplay</li> <li>• Refer/Complete Soft skills module</li> </ul>	<ul style="list-style-type: none"> <li>• Essay and short answer</li> </ul>





			<p>managingtime,copingstress,resilience, work–lifebalance</p> <ul style="list-style-type: none"> <li>• Applyingsoftskilltoworkplaceandsociety – Presentation skills, social etiquette,telephone etiquette, motivational skills,teamwork etc.</li> <li>• Useofsoftskillinnursing</li> </ul>		
X	2(T)	Explain self-empowerment	<p><b>Self-empowerment</b></p> <ul style="list-style-type: none"> <li>• Dimensionsofself-empowerment</li> <li>• Self-empowermentdevelopment</li> <li>• Importanceofwomen’sempowermentinso ciety</li> <li>• Professionaletiquette and personalgrooming</li> <li>• Roleofnurseinempoweringothers</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Shortanswer</li> <li>• Objectivetype</li> </ul>

Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1,Pos-2/Psos-1-Psos-13
COs 2	Pos-1,Pos-2/Psos-1-Psos-13
Cos 3	Pos-1,Pos-2/Psos-1-Psos-13
COs 4	Pos-1,Pos-2/Psos-1-Psos-13
COs 5	Pos-1,Pos-2/Psos-1-Psos-13
COs 6	Pos-1,Pos-2/Psos-1-Psos-13
COs 7	Pos-1,Pos-2/Psos-1-Psos-13
Cos8	Pos-1,Pos-2/Psos-1-Psos-13
Cos9	Pos-1,Pos-2/Psos-1-Psos-13

**Reference Books:**

1. Bhatia B. D, & Craig :- Elements of Psychology & Mental Hygiene
2. Morgan C. T, & King :- Introduction to Psychology, VII the edition, Megrow bill international.
3. Robert C. Calfee : - Human Experimental Psychology





## **FNB110404- NURSING FOUNDATION-I**

**PLACEMENT: I SEMESTER**

**THEORY: 6 Credits (120 hours)**

**PRACTICUM: Skill Lab: 2 Credits (80 hours) and Clinical: 2 Credits (160 hours)**

**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.

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

1. Develop understanding about the concept of health, illness and scope of nursing within health care services.
2. Apply values, code of ethics and professional conduct in professional life.
3. Apply the principles and methods of effective communication in establishing communication links with patients, families and other health team members.
4. Develop skill in recording and reporting.
5. Demonstrate competency in monitoring and documenting vital signs.
6. Describe the fundamental principles and techniques of infection control and biomedical waste management.
7. Identify and meet the comfort needs of the patients.
8. Perform admission, transfer, and discharge of a patient under supervision applying the knowledge.
9. Demonstrate understanding and application of knowledge in caring for patients with restricted mobility.
10. Perform first aid measures during emergencies.
11. Identify the educational needs of patients and demonstrate basic skills of patient education.

**\*Mandatory Module used in Teaching/Learning:**

First Aid: 40 Hours (including Basic CPR)





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	5(T)	Describe the concept of health and illness	<b>Introduction to health and illness</b> <ul style="list-style-type: none"> <li>• Concept of Health – Definitions (WHO), Dimensions</li> <li>• Maslow's hierarchy of needs</li> <li>• Health–Illness continuum</li> <li>• Factors influencing health</li> <li>• Causes and risk factors for developing illnesses</li> <li>• Illness–Types, illness behavior</li> <li>• Impact of illness on patient and family</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>
II	5(T)	Describe the levels of illness prevention and care, health care services	<b>Health Care Delivery Systems – Introduction of Basic Concepts &amp; Meanings</b> <ul style="list-style-type: none"> <li>• Levels of Illness Prevention – Primary (Health Promotion), Secondary and Tertiary</li> <li>• Levels of Care – Primary, Secondary and Tertiary</li> <li>• Types of health care agencies/ services – Hospitals, clinics, Hospice, rehabilitation centres, extended care facilities</li> <li>• Hospitals – Types, Organization and Functions</li> <li>• Health care teams in hospitals – members and their role</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>
III	12(T)	Trace the history of Nursing  Explain the concept, nature and scope of nursing  Describe values, code of ethics and professional conduct for nurses in India	<b>History of Nursing and Nursing as a profession</b> <ul style="list-style-type: none"> <li>• History of Nursing, History of Nursing in India</li> <li>• Contributions of Florence Nightingale</li> <li>• Nursing – Definition – Nurse, Nursing, Concepts, philosophy, objectives, Characteristics, nature and Scope of Nursing/ Nursing practice, Functions of nurse, Qualities of a nurse, Categories of nursing personnel</li> <li>• Nursing as a profession – definition and characteristics/criteria of profession</li> <li>• Values – Introduction – meaning and importance</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Case discussion</li> <li>• Role plays</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answers</li> <li>• Objective type</li> </ul>





			<ul style="list-style-type: none"> <li>• Code of ethics and professional conduct for nurses – Introduction</li> </ul>		
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Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
<b>IV</b>	8(T) 3(SL)	<p>Describe the process, principles, and types of communication</p> <p>Explain therapeutic, non-therapeutic and professional communication</p> <p>Communicate effectively with patients, their families and team members</p>	<p><b>Communication and Nurse Patient Relationship</b></p> <ul style="list-style-type: none"> <li>• Communication – Levels, Elements and Process, Types, Modes, Factors influencing communication</li> <li>• Methods of effective communication/therapeutic communication techniques</li> <li>• Barriers to effective communication/non-therapeutic communication techniques</li> <li>• Professional communication</li> <li>• Helping Relationships (Nurse Patient Relationship) – Purposes and Phases</li> <li>• Communicating effectively with patient, families and team members</li> <li>• Maintaining effective human relations and communication with vulnerable groups (children, women, physically and mentally challenged and elderly)</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Role play and videofilm on Therapeutic Communication</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>
<b>V</b>	4(T) 2(SL)	<p>Describe the purposes, types and techniques of recording and reporting</p> <p>Maintain records and reports accurately</p>	<p><b>Documentation and Reporting</b></p> <ul style="list-style-type: none"> <li>• Documentation – Purposes of Reports and Records</li> <li>• Confidentiality</li> <li>• Types of Client records/Common Record-keeping forms</li> <li>• Methods/Systems of documentation/Recording</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>





			<ul style="list-style-type: none"> <li>• Guidelinesfordocumentation</li> <li>• Do'sandDon'tsofdocumentation/LegalguidelinesforDocumentation/Recording</li> <li>• Reporting– Changeofshiftreports,Transferreports,Incidentreports</li> </ul>		
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Unit	Time (Hrs)	LearningOutcomes	Content	Teaching/ LearningActivities	Assessment Methods
VI	15(T) 20(SL)	Describe principlesand techniques ofmonitoring andmaintaining vitalsigns  Assess and recordvitalsignsaccurately	<b>Vitalsigns</b> <ul style="list-style-type: none"> <li>• Guidelinesfortakingvitalsigns</li> <li>• <i>Bodytemperature</i>–               <ul style="list-style-type: none"> <li>○ Definition,Physiology,Regulation, Factorsaffectingbodytemperature</li> <li>○ Assessmentofbodytemperature– sites,equipmentand technique</li> <li>○ Temperature alterations – Hyperthermia, Heat Cramps, HeatExhaustion,Heatstroke,Hypothermia</li> <li>○ Fever/Pyrexia– Definition,Causes,Stages,Types</li> </ul> </li> <li>• NursingManagement               <ul style="list-style-type: none"> <li>○ HotandColdapplications</li> </ul> </li> <li>• <i>Pulse</i>:               <ul style="list-style-type: none"> <li>○ Definition,PhysiologyandRegulation, Characteristics,Factorsaffectingpulse</li> <li>○ Assessmentofpulse– sites,equipmentand technique</li> <li>○ Alterationsinpulse</li> </ul> </li> <li>• <i>Respiration</i>:               <ul style="list-style-type: none"> <li>○ Definition, Physiology and Regulation,Mechanicsofbreathing,Characteristics, Factorsaffectingrespiration</li> <li>○ Assessmentofrespirations–technique</li> <li>○ ArterialOxygen saturation</li> <li>○ Alterationsinrespiration</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration &amp;Re-demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Shortanswer</li> <li>• Objective type</li> <li>• Document thegivenvalue softemperature,pulse, andrespiration inthe graphicsheet</li> <li>• OSCE</li> </ul>





			<ul style="list-style-type: none"> <li>• <i>Bloodpressure:</i> <ul style="list-style-type: none"> <li>○ Definition,PhysiologyandRegulation, Characteristics,FactorsaffectingBP</li> <li>○ Assessment of BP – sites, equipmentand technique, Common Errors in BPAssessment</li> <li>○ AlterationsinBloodPressure</li> </ul> </li> <li>• DocumentingVitalSigns</li> </ul>		
<b>VII</b>	3(T)	Maintain equipmentandlinen	<p><b>EquipmentandLinen</b></p> <ul style="list-style-type: none"> <li>• Types–Disposablesandreusable           <ul style="list-style-type: none"> <li>○Linen,rubber goods,glassware,metal,plastics,furnitu re</li> </ul> </li> <li>• Introduction– Indent,maintenance,Inventory</li> </ul>		

Unit	Time (Hrs)	LearningOutcomes	Content	Teaching/ LearningActiv ities	Assessment Methods
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<b>VIII</b>	10(T) 3(SL)	Describe the basic principles and techniques of infection control and biomedical waste management	<p><b>Introduction to Infection Control in Clinical Setting</b></p> <ul style="list-style-type: none"> <li>• Nature of infection</li> <li>• Chain of infection</li> <li>• Types of infection</li> <li>• Stages of infection</li> <li>• Factors increasing susceptibility to infection</li> <li>• Body defenses against infection – Inflammatory response &amp; Immune response</li> <li>• Healthcare associated infection (Nosocomial infection)</li> </ul> <p><b>Introductory concept of Asepsis – Medical &amp; Surgical Asepsis</b></p> <p><b>Precautions</b></p> <ul style="list-style-type: none"> <li>• Hand Hygiene</li> <li>• (Hand washing and use of hand Rub)</li> <li>• Use of Personal Protective Equipment (PPE)</li> <li>• Standard precautions</li> </ul> <p><b>Biomedical Waste management</b></p> <ul style="list-style-type: none"> <li>• Types of hospital waste, waste segregation and hazards – Introduction</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> <li>• Observation of autoclaving and other sterilization techniques</li> <li>• Video presentation on medical &amp; surgical asepsis</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>
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Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
<b>IX</b>	15(T) 15(	Identify and meet the comfort needs of the patient	<p><b>Comfort, Rest &amp; Sleep and Pain</b></p> <ul style="list-style-type: none"> <li>• Comfort</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> </ul>





	SL)	s	<ul style="list-style-type: none"> <li>○ Factors Influencing Comfort</li> <li>○ Types of beds including latest beds, purposes &amp; bed making</li> <li>○ Therapeutic positions</li> <li>○ Comfort devices</li> <li>● Sleep and Rest               <ul style="list-style-type: none"> <li>○ Physiology of sleep</li> <li>○ Factors affecting sleep</li> <li>○ Promoting Rest and sleep</li> <li>○ Sleep Disorders</li> </ul> </li> <li>● Pain (Discomfort)               <ul style="list-style-type: none"> <li>○ Physiology</li> <li>○ Common cause of pain</li> <li>○ Types</li> <li>○ Assessment – pain scales and narcotic scales</li> <li>○ Pharmacological and Non-pharmacological pain relieving measures – Use of narcotics, TENS devices, PCA</li> <li>○ Invasive techniques of pain management</li> <li>○ Any other newer measures</li> <li>○ CAM (Complementary &amp; Alternative healing Modalities)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Demonstration &amp; Re-demonstration</li> </ul>	<ul style="list-style-type: none"> <li>● Objective type</li> <li>● OSCE</li> </ul>
X	5(T) 3(SL)	Describe the concept of patient environment	<p><b>Promoting Safety in Health Care Environment</b></p> <ul style="list-style-type: none"> <li>● Physical environment – Temperature, Humidity, Noise, Ventilation, Light, Odor, Pest control</li> <li>● Reduction of Physical hazards – fire, accidents</li> <li>● Fall Risk Assessment</li> <li>● Role of nurse in providing safe and clean environment</li> <li>● Safety devices –               <ul style="list-style-type: none"> <li>○ Restraints – Types, Purposes, Indications, Legal Implications and Consent, Application of Restraints – Skill and Practice guidelines</li> <li>○ Other Safety Devices – Siderails, Grabbars, Ambu alarms, non-skid slippers</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Lecture</li> <li>● Discussion</li> <li>● Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>● Essay</li> <li>● Short answer</li> <li>● Objective type</li> </ul>
<b>Unit</b>	<b>Time (Hrs)</b>	<b>Learning Outcomes</b>	<b>Content</b>	<b>Teaching/ Learning Activities</b>	<b>Assessment Methods</b>





<p><b>XI</b></p>	<p>6(T) 2(SL)</p>	<p>Explain and perform admission, transfer, and discharge of a patient</p>	<p><b>Hospital Admission and Discharge</b></p> <ul style="list-style-type: none"> <li>• Admission to the hospital Unit and preparation of unit               <ul style="list-style-type: none"> <li>○ Admission bed</li> <li>○ Admission procedure</li> <li>○ Medico-legal issues</li> <li>○ Roles and Responsibilities of the nurse</li> </ul> </li> <li>• Discharge from the hospital               <ul style="list-style-type: none"> <li>○ Types – Planned discharge, LAMA and Abscond, Referrals and transfers</li> <li>○ Discharge Planning</li> <li>○ Discharge procedure</li> <li>○ Medico-legal issues</li> <li>○ Roles and Responsibilities of the nurse</li> <li>○ Care of the unit after discharge</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>
<p><b>XII</b></p>	<p>8(T) 10(SL)</p>	<p>Demonstrate skill in caring for patients with restricted mobility</p>	<p><b>Mobility and Immobility</b></p> <ul style="list-style-type: none"> <li>• Elements of Normal Movement, Alignment &amp; Posture, Joint Mobility, Balance, Coordinated Movement</li> <li>• Principles of body mechanics</li> <li>• Factors affecting Body Alignment and activity</li> <li>• Exercise – Types and benefits</li> <li>• Effects of Immobility</li> <li>• Maintenance of normal Body Alignment and Activity</li> <li>• Alteration in Body Alignment and mobility</li> <li>• Nursing interventions for impaired Body Alignment and Mobility – assessment, types, devices used, method               <ul style="list-style-type: none"> <li>○ Range of motion exercises</li> <li>○ Muscle strengthening exercises</li> <li>○ Maintaining body alignment – positions</li> <li>○ Moving</li> <li>○ Lifting</li> <li>○ Transferring</li> <li>○ Walking</li> </ul> </li> <li>• Assisting clients with ambulation</li> <li>• Care of patients with Immobility using Nursing process approach</li> <li>• Care of patients with casts and splints</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration &amp; Re-demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective TYPE</li> <li>• OSCE</li> </ul>
<p><b>Unit</b></p>	<p>Time (Hrs)</p>	<p>Learning Outcomes</p>	<p><b>Content</b></p>	<p>Teaching/ Learning Activities</p>	<p>Assessment Methods</p>





<b>XIII</b>	4(T) 2(SL)	Describe the principles and practice of patient education	<b>Patient education</b> <ul style="list-style-type: none"> <li>• Patient Teaching – Importance, Purposes, Process</li> <li>• Integrating nursing process in patient teaching</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Roleplays</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>
<b>XIV</b>	20(T) 20(SL)	Explain and apply principles of First Aid during emergencies	<b>First Aid*</b> <ul style="list-style-type: none"> <li>• Definition, Basic Principles, Scope &amp; Rules</li> <li>• First Aid Management               <ul style="list-style-type: none"> <li>○ Wounds, Hemorrhage &amp; Shock</li> <li>○ Musculoskeletal Injuries – Fractures, Dislocation, Muscle injuries</li> <li>○ Transportation of Injured persons</li> <li>○ Respiratory Emergencies &amp; Basic CPR</li> <li>○ Unconsciousness</li> <li>○ Foreign Bodies – Skin, Eye, Ear, Nose, Throat &amp; Stomach</li> <li>○ Burns &amp; Scalds</li> <li>○ Poisoning, Bites &amp; Stings</li> <li>○ Frostbite &amp; Effects of Heat</li> <li>○ Community Emergencies</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration &amp; Re-demonstration</li> <li>• Module completion</li> <li>• National Disaster Management Authority (NDMA) / Indian Red Cross Society (IRCS) First Aid module</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> <li>• OSCE</li> </ul>





Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1,Pos-2/Psos-1-Psos-13
COs 2	Pos-1,Pos-2/Psos-1-Psos-13
Cos 3	Pos-1,Pos-2/Psos-1-Psos-13
COs 4	Pos-1,Pos-2/Psos-1-Psos-13
COs 5	Pos-1,Pos-2/Psos-1-Psos-13
COs 6	Pos-1,Pos-2/Psos-1-Psos-13
COs 7	Pos-1,Pos-2/Psos-1-Psos-13
Cos8	Pos-1,Pos-2/Psos-1-Psos-13
Cos9	Pos-1,Pos-2/Psos-1-Psos-13
Cos10	Pos-1,Pos-2/Psos-1-Psos-13
Cos11	Pos-1,Pos-2/Psos-1-Psos-13

#### Reference Books:

1. Barbara Kosler et al, “ Fundamentals of Nursing concepts and procedure”, Addison Welsloy publishing Co., 13 th edition
2. Potter and perry, “Fundamentals of Nursing concepts-process and practice”, C.V Mosby
3. First Aid Manual, The authorized manual of St. John’s Ambulance, dorlingKindersly





## **FNB120401- APPLIED BIOCHEMISTRY**

**PLACEMENT: I SEMESTER**

**THEORY: 2 credits (40 hours) (includes lab hours also)**

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

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

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





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
I	8(T)	Describe the metabolism of carbohydrates and its alterations	<b>Carbohydrates</b> <ul style="list-style-type: none"> <li>• Digestion, absorption and metabolism of carbohydrates and related disorders</li> <li>• Regulation of blood glucose</li> <li>• Diabetes Mellitus – type 1 and type 2, symptoms, complications &amp; management in brief</li> <li>• Investigations of Diabetes Mellitus               <ul style="list-style-type: none"> <li>○ OGTT – Indications, Procedure, Interpretation and types of GTT curve</li> <li>○ Mini GTT, extended GTT, GCT, IVGTT</li> <li>○ HbA1c (Only definition)</li> </ul> </li> <li>• Hypoglycemia – Definition &amp; causes</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Explain using charts and slides</li> <li>• Demonstration of laboratory tests</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Very short answer</li> </ul>
II	8(T)	Explain the metabolism of lipids and its alterations	<b>Lipids</b> <ul style="list-style-type: none"> <li>• Fatty acids – Definition, classification</li> <li>• Definition &amp; Clinical significance of MUFA &amp; PUFA, Essential fatty acids, Trans fatty acids</li> <li>• Digestion, absorption &amp; metabolism of lipids &amp; related disorders</li> <li>• Compounds formed from cholesterol</li> <li>• Ketone bodies (name, types &amp; significance only)</li> <li>• Lipoproteins – types &amp; functions (metabolism not required)</li> <li>• Lipid profile Atherosclerosis (in brief)</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Explain using charts and slides</li> <li>• Demonstration of laboratory tests</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Very short answer</li> </ul>





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
III	9(T)	Explain the metabolism of amino acids and proteins	<b>Proteins</b> <ul style="list-style-type: none"> <li>• Classification of amino acids based on nutrition, metabolic rate with examples</li> <li>• Digestion, absorption &amp; metabolism of protein &amp; related disorders</li> <li>• Biologically important compounds synthesized from various amino acids (only names)</li> <li>• Inborn errors of amino acid metabolism – only aromatic amino acids (in brief)</li> <li>• Plasma protein – types, function &amp; normal values</li> <li>• Causes of proteinuria, hypoproteinemia, hyper-gammaglobinemia</li> <li>• Principle of electrophoresis, normal &amp; abnormal electrophoretic patterns (in brief)</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Explain using charts, models and slides</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer Very short answer</li> </ul>
IV	4(T)	Explain clinical enzymology in various disease conditions	<b>Clinical Enzymology</b> <ul style="list-style-type: none"> <li>• Isoenzymes – Definition &amp; properties</li> <li>• Enzymes of diagnostic importance in               <ul style="list-style-type: none"> <li>○ Liver Diseases – ALT, AST, ALP, GGT</li> <li>○ Myocardial infarction – CK, cardiac troponins, AST, LDH</li> <li>○ Muscular diseases – CK, Aldolase</li> <li>○ Bone diseases – ALP</li> </ul> </li> <li>Prostate cancer – PSA, ACP</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Explain using charts and slides</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Very short answer</li> </ul>
V	3(T)	Explain acid base balance, imbalance and its clinical significance	<b>Acid base maintenance</b> <ul style="list-style-type: none"> <li>• pH – definition, normal value</li> <li>• Regulation of blood pH – blood buffer, respiratory &amp; renal</li> <li>• ABG – normal values</li> </ul> Acid base disorders – types, definition & causes	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Explain using charts and slides</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Very short answer</li> </ul>
VI	2(T)	Describe the metabolism of hemoglobin and its clinical significance	<b>Hemecatabolism</b> <ul style="list-style-type: none"> <li>• Hemecatabolism pathway</li> </ul> Jaundice – type, causes, urine & blood investigations (vandenbergt test)	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Explain using charts and slides</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Very short answer</li> </ul>





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
VII	3(T)	Explain different function tests and interpret the findings	<b>Organ function tests (biochemical parameters &amp; normal values only)</b> <ul style="list-style-type: none"> <li>• Renal</li> <li>• Liver</li> <li>• Thyroid</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Visit to Lab</li> </ul> Explain using charts and slides	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Very short answer</li> </ul>
VIII	3(T)	Illustrate the immunology	<b>Immunochemistry</b> <ul style="list-style-type: none"> <li>• Structure &amp; functions of immunoglobulin</li> </ul> Investigations & interpretation – ELISA	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Explain using charts and slides</li> <li>• Demonstration of laboratory tests</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Very short answer</li> </ul>

Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1, Pos-2/ Psos-1- Psos-13
COs 2	Pos-1, Pos-2/ Psos-1- Psos-13
Cos 3	Pos-1, Pos-2/ Psos-1- Psos-13
COs 4	Pos-1, Pos-2/ Psos-1- Psos-13
COs 5	Pos-1, Pos-2/ Psos-1- Psos-13
COs 6	Pos-1, Pos-2/ Psos-1- Psos-13
COs 7	Pos-1, Pos-2/ Psos-1- Psos-13
Cos8	Pos-1, Pos-2/ Psos-1- Psos-13

**Reference Books:**

1. A.M.Mungikar, Biochemistry for Nursing students, Frontline publication, 2<sup>nd</sup> edition, 2018.
2. Dr. Alok Rawat, Applied biochemistry, Jain publication, 1<sup>st</sup> edition-2023





## **FNB120401- APPLIED NUTRITION & DIETETICS**

**PLACEMENT: I SEMESTER**

**THEORY:** 3 credits (60 hours)

Theory: 45 hours

Lab : 15 hours

**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.

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

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





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	2(T)	Define nutrition and its relationship to Health	<p><b>Introduction to Nutrition</b></p> <p><i>Concepts</i></p> <ul style="list-style-type: none"> <li>• Definition of Nutrition &amp; Health</li> <li>• Malnutrition – Under Nutrition &amp; Over Nutrition</li> <li>• Role of Nutrition in maintaining health</li> <li>• Factors affecting food and nutrition</li> </ul> <p><i>Nutrients</i></p> <ul style="list-style-type: none"> <li>• Classification</li> <li>• Macro &amp; Micronutrients</li> <li>• Organic &amp; Inorganic</li> <li>• Energy Yielding &amp; Non-Energy Yielding</li> </ul> <p><i>Food</i></p> <ul style="list-style-type: none"> <li>• Classification – Food groups</li> <li>• Origin</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Charts/Slides</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Very short answer</li> </ul>
II	3(T)	Describe the classification, functions, sources and recommended daily allowances (RDA) of carbohydrates  Explain BMR and factors affecting BMR	<p><b>Carbohydrates</b></p> <ul style="list-style-type: none"> <li>• Composition – Starches, sugar and cellulose</li> <li>• Recommended Daily Allowance (RDA)</li> <li>• Dietary sources</li> <li>• Functions</li> </ul> <p><b>Energy</b></p> <ul style="list-style-type: none"> <li>• Unit of energy – Kcal</li> <li>• Basal Metabolic Rate (BMR)</li> <li>• Factors affecting BMR</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Charts/Slides</li> <li>• Models</li> <li>• Display of food items</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Very short answer</li> </ul>
III	3(T)	Describe the classification, Functions, sources and RDA of proteins.	<p><b>Proteins</b></p> <ul style="list-style-type: none"> <li>• Composition</li> <li>• Eight essential amino acids</li> <li>• Functions</li> <li>• Dietary sources</li> <li>• Protein requirements – RDA</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Charts/Slides</li> <li>• Models</li> <li>• Display of food items</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Very short answer</li> </ul>





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Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
IV	2(T)	Describe the classification, Functions, sources and RDA of fats	<b>Fats</b> <ul style="list-style-type: none"> <li>• Classification – Saturated &amp; unsaturated</li> <li>• Calorie value</li> <li>• Functions</li> <li>• Dietary sources of fats and fatty acids</li> <li>• Fat requirements – RDA</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Charts/Slides</li> <li>• Models</li> <li>• Display of food items</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Very short answer</li> </ul>
V	3(T)	Describe the classification, functions, sources and RDA of vitamins	<b>Vitamins</b> <ul style="list-style-type: none"> <li>• Classification – fat soluble &amp; water soluble</li> <li>• Fat soluble – Vitamins A, D, E, and K</li> <li>• Water soluble – Thiamine (vitamin B1), Riboflavin (vitamin B2), Nicotinic acid, Pyridoxine (vitamin B6), Pantothenic acid, Folic acid, Vitamin B12, Ascorbic acid (vitamin C)</li> </ul> Functions, Dietary Sources & Requirements – RDA of every vitamin	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Charts/Slides</li> <li>• Models</li> <li>• Display of food items</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Very short answer</li> </ul>
VI	3(T)	Describe the classification, functions, sources and RDA of minerals	<b>Minerals</b> <ul style="list-style-type: none"> <li>• Classification – Major minerals (Calcium, phosphorus, sodium, potassium and magnesium) and Trace elements</li> <li>• Functions</li> <li>• Dietary Sources</li> <li>• Requirements – RDA</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Charts/Slides</li> <li>• Models</li> <li>• Display of food items</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Very short answer</li> </ul>
VII	7(T) 8(L)	Describe and plan balanced diet for different age groups, pregnancy, and lactation	<b>Balanced diet</b> <ul style="list-style-type: none"> <li>• Definition, principles, steps</li> <li>• Food guides – Basic Four Food Groups</li> <li>• RDA – Definition, limitations, uses</li> <li>• Food Exchange System</li> <li>• Calculation of nutritive value of foods</li> <li>• Dietary fibre</li> </ul> <b>Nutrition across lifecycle</b> <ul style="list-style-type: none"> <li>• Meal planning / Menu planning – Definition, principles, steps</li> <li>• Infant and Young Child Feeding (IYCF) guidelines – breastfeeding, infant foods</li> <li>• Diet plan for different age groups – Children, adolescents and elderly</li> <li>• Diet in pregnancy – nutritional requirements and balanced diet plan</li> <li>• Anemia in pregnancy –</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Meal planning</li> <li>• Lab session on               <ul style="list-style-type: none"> <li>○ Preparation of balanced diet for different categories</li> </ul> </li> <li>• Low cost nutritious dishes</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Very short answer</li> </ul>





			<p>diagnosis, diet for anemic pregnant women, iron &amp; folic acid supplementation and counseling</p> <p>Nutrition in lactation – nutritional requirements, diet for lactating mothers, complementary feeding/ weaning</p>		
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Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
VIII	6(T)	Classify and describe the common nutritional deficiency disorders and identify nurses' role in assessment, management and prevention	<p><b>Nutritional deficiency disorders</b></p> <ul style="list-style-type: none"> <li>• Protein energy malnutrition – magnitude of the problem, causes, classification, signs &amp; symptoms, Severe acute malnutrition (SAM), management &amp; prevention and nurses' role</li> <li>• Childhood obesity – signs &amp; symptoms, assessment, management &amp; prevention and nurses' role</li> <li>• Vitamin deficiency disorders – vitamin A, B, C &amp; D deficiency disorders – causes, signs &amp; symptoms, management &amp; prevention and nurses' role</li> <li>• Mineral deficiency diseases – iron, iodine and calcium deficiencies – causes, signs &amp; symptoms, management &amp; prevention and nurses' role</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Charts/Slides Models</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer Very short answer</li> </ul>
IX	4(T) 7(L)	Principles of diets in various diseases	<p><b>Therapeutic diets</b></p> <ul style="list-style-type: none"> <li>• Definition, Objectives, Principles</li> <li>• Modifications – Consistency, Nutrients,</li> <li>• Feeding techniques.</li> </ul> <p>Diet in Diseases – Obesity, Diabetes Mellitus, CVD, Underweight, Renal diseases, Hepatic disorders Constipation, Diarrhea, Pre and Post-operative period</p>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Meal planning</li> <li>• Lab session on preparation of therapeutic diets</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Very short answer</li> </ul>
X	3(T)	Describe the rules and preservation of nutrients	<p><b>Cookery rules and preservation of nutrients</b></p> <ul style="list-style-type: none"> <li>• Cooking – Methods, Advantages and Disadvantages</li> <li>• Preservation of nutrients</li> <li>• Measures to prevent loss of nutrients during preparation</li> <li>• Safe food handling and Storage of foods</li> <li>• Food preservation</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Charts/Slides</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Very short answer</li> </ul>





			<ul style="list-style-type: none"> <li>• Food additives and food adulteration</li> <li>• Prevention of Food Adulteration Act (PFA)</li> </ul> <p>Food standards</p>		
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Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
<b>XI</b>	4(T)	Explain the method of nutritional assessment and nutrition education	<b>Nutrition assessment and nutrition education</b> <ul style="list-style-type: none"> <li>• Objectives of nutritional assessment</li> <li>• Methods of assessment – clinical examination, anthropometry, laboratory &amp; biochemical assessment, assessment of dietary intake including Food frequency questionnaire (FFQ) method</li> <li>• Nutrition education – purposes, principles and methods</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Demonstration Writing nutritional assessment report</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer Evaluation of Nutritional assessment report</li> </ul>
<b>XII</b>	3(T)	Describe nutritional problems in India and nutritional programs	<b>National Nutritional Programs and role of nurse</b> <ul style="list-style-type: none"> <li>• Nutritional problems in India</li> <li>• National nutritional policy</li> <li>• <i>National nutritional programs – Vitamin A Supplementation, Anemia Mukh 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</i></li> </ul> <p>Role of nurse in every program</p>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Very short answer</li> </ul>
<b>XIII</b>	2(T)	Discuss the importance of food hygiene and food safety  Explain the Acts related to food safety	<b>Food safety</b> <ul style="list-style-type: none"> <li>• Definition, Food safety considerations &amp; measures</li> <li>• Food safety regulatory measures in India – Relevant Acts</li> <li>• Five keys to safer food</li> <li>• Food storage, food handling and cooking</li> <li>• General principles of food storage of food</li> </ul>	<ul style="list-style-type: none"> <li>• Guided reading on related acts</li> </ul>	<ul style="list-style-type: none"> <li>• Quiz</li> <li>• Short answer</li> </ul>





			ms(ex. milk,meat) • Roleoffoodhandlersinfoodbornedis eases Essentialstepsinsafecookingpractices		
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Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1,Pos-2/Psos-1-Psos-13
COs 2	Pos-1,Pos-2/Psos-1-Psos-13
Cos 3	Pos-1,Pos-2/Psos-1-Psos-13
COs 4	Pos-1,Pos-2/Psos-1-Psos-13
COs 5	Pos-1,Pos-2/Psos-1-Psos-13
COs 6	Pos-1,Pos-2/Psos-1-Psos-13
COs 7	Pos-1,Pos-2/Psos-1-Psos-13

### Reference Books:

1. Anderson, “ Nutrition in Nursing”, Lippincot Co.,
2. Antia, E P, “Clinical Dietetics and Nutrition”, 2nd edition, Oxford University Press, New Delhi, 1995.
3. Patwardhan V. N., “Nutrition in India”, 2nd edition





## **FNB120402- NURSING FOUNDATION-II**

**PLACEMENT: I SEMESTER**

**THEORY: 6 Credits (120 hours)**

**PRACTICUM: Skill Lab: 3 Credits (120 hours), Clinical: 4 Credits (320 hours)**

**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.

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

1. Develop understanding about fundamentals of health assessment and perform health assessment in supervised clinical settings
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 hygienic needs of patients
5. Identify and meet the elimination needs of patient
6. Interpret findings of specimen testing applying the knowledge of normal values
7. Promote oxygenation based on identified oxygenation needs of patients under supervision
8. Review the concept of fluid, electrolyte balance integrating the knowledge of applied physiology
9. Apply the knowledge of the principles, routes, effects of administration of medications in administering medication
10. Calculate conversions of drugs and dosages within and between systems of measurements
11. Demonstrate knowledge and understanding in caring for patients with altered functioning of sense organs and unconsciousness
12. Explain loss, death and grief





13. Describe sexual development and sexuality
14. Identify stressors and stress adaptation modes
15. Integrate the knowledge of culture and cultural differences in meeting the spiritual needs
16. 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

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	20(T) 20(SL)	Describe the purpose and process of health assessment and perform assessment under supervised clinical practice	<b>Health Assessment</b> <ul style="list-style-type: none"> <li>• Interview techniques</li> <li>• Observation techniques</li> <li>• Purposes of health assessment</li> <li>• Process of Health assessment               <ul style="list-style-type: none"> <li>○ Health history</li> <li>○ Physical examination:                   <ul style="list-style-type: none"> <li>▪ Methods: Inspection, Palpation, Percussion, Auscultation, Olfaction</li> <li>▪ Preparation for examination: patient and unit</li> <li>▪ General assessment</li> <li>▪ Assessment of each body system</li> <li>▪ Documenting health assessment findings</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Modular Learning</li> <li>• *Health Assessment Module</li> <li>• Lecture cum Discussion</li> <li>• Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> <li>• OSCE</li> </ul>
II	13(T) 8(SL)	Describe assessment, planning, implementation and evaluation of nursing care using Nursing processes	<ul style="list-style-type: none"> <li>○ <b>Assessment</b> <ul style="list-style-type: none"> <li>▪ Collection of Data: Types, Sources, Methods</li> <li>▪ Organizing Data</li> <li>▪ Validating Data</li> <li>▪ Documenting Data</li> </ul> </li> <li>○ <b>Nursing Diagnosis</b> <ul style="list-style-type: none"> <li>▪ Identification of client problems, risks and strengths</li> <li>▪ Nursing diagnosis statement – parts, Types, Formulating, Guidelines for formulating Nursing Diagnosis</li> <li>▪ NANDA approved diagnoses</li> <li>▪ Difference between medical and nursing diagnosis</li> </ul> </li> <li>○ <b>Planning</b> <ul style="list-style-type: none"> <li>▪ Types of planning</li> <li>▪ Establishing Priorities</li> <li>▪ Establishing Goals and Expected Outcomes – Purposes, types, guidelines, Components of goals and outcome statements</li> <li>▪ Types of Nursing Interventions, Selecting interventions:</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> <li>• Supervised Clinical Practice</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objectivity type</li> <li>• Evaluation of care plan</li> </ul>





			<p>Protocols and Standing Orders</p> <ul style="list-style-type: none"> <li>▪ Introduction to Nursing Intervention Classification and Nursing Outcome Classification</li> <li>▪ Guidelines for writing care plan</li> </ul> <p>○ <b>Implementation</b></p> <ul style="list-style-type: none"> <li>▪ Process of Implementing the plan of care</li> <li>▪ Types of care – Direct and Indirect</li> </ul> <p>○ <b>Evaluation-</b> Process, Documentation</p>		
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Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
<b>III</b>	5(T) 5(SL)	Identify and meet the Nutritional needs of patients	<p><b>Nutritional needs</b></p> <ul style="list-style-type: none"> <li>• Importance</li> <li>• Factors affecting nutritional needs</li> <li>• Assessment of nutritional status</li> <li>• <i>Review:</i> special diets – Solid, Liquid, Soft</li> <li>• <i>Review</i> on therapeutic diets</li> <li>• Care of patient with Dysphagia, Anorexia, Nausea, Vomiting</li> <li>• Meeting Nutritional needs: Principles, equipment, procedure, indications               <ul style="list-style-type: none"> <li>○ Oral</li> <li>○ Enteral: Nasogastric/ Orogastric</li> <li>○ Introduction to other enteral feeds – types, indications, Gastrostomy, Jejunostomy</li> </ul> </li> <li>• Parenteral – TPN (Total Parenteral Nutrition)</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> <li>• Exercise Supervised Clinical practice</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objectivity type Evaluation of nutrition assessment &amp; diet planning</li> </ul>
<b>IV</b>	5(T) 15(SL)	Identify and meet the hygienic need of patients	<p><b>Hygiene</b></p> <ul style="list-style-type: none"> <li>• Factors Influencing Hygienic Practice</li> <li>• Hygienic care: Indications and purposes, effects of neglected care               <ul style="list-style-type: none"> <li>○ Care of the Skin – (Bath, feet and nail, Hair Care)</li> <li>○ Care of pressure points</li> <li>○ Assessment of Pressure Ulcers using Braden Scale and Norton Scale</li> <li>○ Pressure ulcers – causes, stages and manifestations, care and prevention</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objectivity type</li> <li>• OSCE</li> </ul>





			<ul style="list-style-type: none"> <li>○ Perinealcare/Meatalcare</li> <li>Oralcare,CareofEyes,EarsandNose including assistive devices (eyeglasses,contactlens,dentures,hearingaid)</li> </ul>		
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Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
V	10(T) 10(S) 10(L)	Identifyandmeetthe eliminationneeds ofpatient	<p><b>Eliminationneeds</b></p> <ul style="list-style-type: none"> <li>▪ UrinaryElimination               <ul style="list-style-type: none"> <li>• ReviewofPhysiologyofUrinaryElimination, Composition andcharacteristicsof urine</li> <li>• FactorsInfluencingUrination</li> <li>• AlterationinUrinaryElimination</li> <li>• Facilitating urine elimination:assessment,types,equipment,procedures andspecialconsiderations</li> <li>• Providingurinal/bedpan</li> <li>• Careofpatientswith</li> </ul> </li> <li>▪ Condomdrainage</li> <li>▪ IntermittentCatheterization</li> <li>▪ Indwelling Urinary catheter andurinarydrainage</li> <li>▪ UrinarydiversionsBladderirrigation</li> <li>▪ BowelElimination               <ul style="list-style-type: none"> <li>• ReviewofPhysiologyof BowelElimination, Composition andcharacteristicsof feces</li> <li>• FactorsaffectingBowelElimination</li> <li>• AlterationinBowelElimination</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Shortanswer</li> <li>• Objectivetype OSCE</li> </ul>





			<ul style="list-style-type: none"> <li>• Facilitating bowel elimination: Assessment, equipment, procedures</li> <li>• Enemas</li> <li>• Suppository</li> <li>• Bowel wash</li> <li>• Digital Evacuation of impacted feces</li> <li>▪ Care of patients with Ostomies (Bowel Diversion Procedures)</li> </ul>		
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Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
VI	3(T) 4(SL)	<p>Explain various types of specimens and identify normal values of tests</p> <p>Develop skill in specimen collection, handling and transport</p>	<p><b>Diagnostic testing</b></p> <ul style="list-style-type: none"> <li>• Phases of diagnostic testing (pre-test, intra-test &amp; post-test) in Common investigations and clinical implications               <ul style="list-style-type: none"> <li>○ Complete Blood Count</li> <li>○ Serum Electrolytes</li> <li>○ LFT</li> <li>○ Lipid/Lipoprotein profile</li> <li>○ Serum Glucose – AC, PC, HbA1c</li> <li>○ Monitoring Capillary Blood Glucose (Glucometer Random Blood Sugar – GRBS)</li> <li>○ Stool Routine Examination</li> <li>○ Urine Testing – Albumin, Acetone, pH, Specific Gravity</li> <li>○ Urine Culture, Routine, Timed Urine Specimen</li> <li>○ Sputum culture</li> <li>○ Overview of Radiologic &amp; Endoscopic Procedures</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer Objective type</li> </ul>
VII	11(T) 10(SL)	<p>Assess patients for oxygenation needs, promote oxygenation and provide care during oxygen therapy</p>	<p><b>Oxygenation needs</b></p> <ul style="list-style-type: none"> <li>• Review of Cardiovascular and Respiratory Physiology</li> <li>• Factors affecting respiratory functioning</li> <li>• Alterations in Respiratory Functioning</li> <li>• Conditions affecting</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration &amp; Re-demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>





			<ul style="list-style-type: none"> <li>○ Airway</li> <li>○ Movement of air</li> <li>○ Diffusion</li> <li>○ Oxygen transport</li> <li>● Alterations in oxygenation</li> <li>● Nursing intervention to promote oxygenation: assessment, types, equipment used &amp; procedure</li> <li>○ Maintenance of patent airway</li> <li>○ Oxygen administration</li> <li>○ Suctioning – oral, tracheal</li> <li>○ Chest physiotherapy – Percussion, Vibration &amp; Postural drainage</li> <li>○ Care of Chest drainage – principles &amp; purposes</li> <li>○ Pulse Oximetry – Factors affecting measurement of oxygen saturation using pulse oximeter, Interpretation</li> <li>● Restorative &amp; continuing care</li> <li>○ Hydration</li> <li>○ Humidification</li> <li>○ Coughing techniques</li> <li>○ Breathing exercises</li> <li>○ Incentive spirometry</li> </ul>		
VIII	5(T) 10(SL) )	Describe the concept of fluid, electrolyte balance	<p><b>Fluid, Electrolyte, and Acid – Base Balances</b></p> <ul style="list-style-type: none"> <li>● Review of Physiological Regulation of Fluid, Electrolyte and Acid-Base Balances</li> <li>● Factors Affecting Fluid, Electrolyte and Acid-Base Balances</li> <li>● Disturbances in fluid volume: <ul style="list-style-type: none"> <li>○ Deficit <ul style="list-style-type: none"> <li>▪ Hypovolemia</li> <li>▪ Dehydration</li> </ul> </li> <li>○ Excess <ul style="list-style-type: none"> <li>▪ Fluid overload</li> <li>▪ Edema</li> </ul> </li> </ul> </li> <li>● Electrolyte imbalances (hypo and hyper) <ul style="list-style-type: none"> <li>○ Acid-base imbalances <ul style="list-style-type: none"> <li>▪ Metabolic – acidosis &amp; alkalosis</li> <li>▪ Respiratory – acidosis &amp; alkalosis</li> </ul> </li> </ul> </li> </ul> <p>Intravenous therapy</p> <ul style="list-style-type: none"> <li>▪ Peripheral venipuncture sites</li> <li>▪ Types of IV fluids</li> <li>▪ Calculation for making IV fluid</li> </ul>	<ul style="list-style-type: none"> <li>● Lecture</li> <li>● Discussion</li> <li>● Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>● Essay</li> <li>● Short answer</li> <li>● Objective type</li> <li>● Problem solving – calculations</li> </ul>





			<p>an</p> <ul style="list-style-type: none"> <li>▪ ComplicationsofIV fluidtherapy</li> <li>▪ Measuringfluidintakeandoutput</li> <li>▪ AdministeringBloodandBloodc omponents</li> <li>▪ Restrictingfluidintake</li> </ul> <p>EnhancingFluidintake</p>		
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Unit	Time (Hrs)	LearningOutcomes	Content	Teaching/ LearningActiv ities	Assessment Methods
<b>IX</b>	20(T) 22(S) L)	<p>Explain theprinciples, routes,effectsofad ministration ofmedications</p> <p>Calculateconversio ns ofdrugsanddosag eswithinandbetwee nsystemsofmeasur ements</p> <p>Administer oral andtopical medicationand documentaccurately undersupervision</p>	<p><b>AdministrationofMedications</b></p> <ul style="list-style-type: none"> <li>• Introduction – DefinitionofMedication, Administration ofMedication,DrugNomenclature,Effect sof Drugs, Forms of Medications,Purposes,Pharmacodynami csandPharmacokinetics</li> <li>• FactorsinfluencingMedicationAction</li> <li>• MedicationordersandPrescriptions</li> <li>• Systemsofmeasurement</li> <li>• Medicationdosecalculation</li> <li>• Principles,10rightsofMedicationA dministration</li> <li>• ErrorsinMedicationadministration</li> <li>• Routesofadministration</li> <li>• StorageandmaintenanceofdrugsandNu rsesresponsibility</li> <li>• Terminologiesandabbreviationsusedi nprescriptionsandmedicationsorders</li> <li>• Developmentalconsiderations</li> <li>• Oral,SublingualandBuccalroutes:E quipment,procedure</li> <li>• Introduction to ParenteralAdministration of Drugs – Intramuscular, Intravenous,Subcutaneous, Intradermal: Location ofsite, Advantages and disadvantages ofthe specific sites,</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration &amp;Re- demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Shortanswer</li> <li>• Objectivetype OSCE</li> </ul>





			<p>Indication and contraindications for the different routes and sites.</p> <ul style="list-style-type: none"> <li>• Equipment – Syringes &amp; needles, cannulas, Infusion sets – parts, types, sizes</li> <li>• Types of vials and ampoules, Preparing Injectable medicines from vials and ampoules</li> </ul> <p>○ Care of equipment: decontamination and disposal of syringes, needles, infusion sets</p> <p>○ Prevention of Needle-Stick Injuries</p> <ul style="list-style-type: none"> <li>• Topical Administration: Types, purposes, site, equipment, procedure</li> <li>○ Application to skin &amp; mucous membrane</li> <li>○ Direct application of liquids, Gargles and swabbing the throat</li> <li>○ Insertion of Drug into body cavity: Suppository/ medicated packing in rectum/vagina</li> <li>○ Instillations: Ear, Eye, Nasal, Bladder, and Rectal</li> <li>○ Irrigations: Eye, Ear, Bladder, Vaginal and Rectal</li> <li>○ Spraying: Nose and throat</li> <li>• Inhalation: Nasal, oral, endotracheal/tracheal (steam, oxygen and medications) – purposes, types, equipment, procedure, recording and reporting of medications administered</li> </ul> <p>Other Parenteral Routes: Meaning of epidural, intrathecal, intraosseous, intraperitoneal, intra-pleural, intra-arterial</p>		
X	5(T) 6(SL)	Provide care to patients with altered functioning of sense organs and unconsciousness in supervised clinical practice	<p><b>Sensory needs</b></p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Components of sensory experience – Reception, Perception &amp; Reaction</li> <li>• Arousal Mechanism</li> <li>• Factors affecting sensory function</li> <li>• Assessment of Sensory alterations –</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objectivity type</li> </ul>





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
			sensory deficit, deprivation, overload & sensory poverty <ul style="list-style-type: none"> <li>Management</li> <li>Promoting meaningful communication (patients with Aphasia, artificial airway &amp; Visual and Hearing impairment)</li> </ul> <b>Care of Unconscious Patients</b> <ul style="list-style-type: none"> <li>Unconsciousness: Definition, causes &amp; risk factors, pathophysiology, stages of Unconsciousness, Clinical Manifestations</li> <li>Assessment and nursing management of patient with unconsciousness, complications</li> </ul>		
<b>XI</b>	4(T) 6(SL)	Explain loss, death and grief	<b>Care of Terminally ill, death and dying</b> <ul style="list-style-type: none"> <li>Loss – Types</li> <li>Grief, Bereavement &amp; Mourning</li> <li>Types of Grief responses</li> <li>Manifestations of Grief</li> <li>Factors influencing Loss &amp; Grief Responses</li> <li>Theories of Grief &amp; Loss – Kubler Ross</li> <li>5 Stages of Dying</li> <li>The R Process model (Rando's)</li> <li>Death – Definition, Meaning, Types (Brain &amp; Circulatory Deaths)</li> <li>Signs of Impending Death</li> <li>Dying patient's Bill of Rights</li> <li>Care of Dying Patient</li> <li>Physiological changes occurring after Death</li> <li>Death Declaration, Certification</li> <li>Autopsy</li> <li>Embalming</li> <li>Last office/Death Care</li> <li>Counseling &amp; supporting grieving relatives</li> <li>Placing body in the Mortuary</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> <li>Case discussions</li> <li>Deathcare/last office</li> </ul>	<ul style="list-style-type: none"> <li>Essay</li> <li>Short answer Objective type</li> </ul>





			<ul style="list-style-type: none"> <li>Releasing body from Mortuary</li> </ul> <p>Overview – Medico-legal Cases, Advanced directives, DNI/DNR, Organ Donation, Euthanasia</p>		
<b>XII</b>	3(T)	Develop basic understanding of self-concept	<p><b>A. Self-concept</b></p> <ul style="list-style-type: none"> <li>Introduction</li> <li>Components (Personal Identity, Body Image, Role Performance, Self Esteem)</li> <li>Factors affecting Self Concept</li> <li>Nursing Management</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> <li>Demonstration</li> <li>Case Discussion/Roleplay</li> </ul>	<ul style="list-style-type: none"> <li>Essay</li> <li>Short answer</li> <li>Objective type</li> </ul>

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
<b>XIII</b>	2(T)	Describe sexual development and sexuality	<p><b>B. Sexuality</b></p> <ul style="list-style-type: none"> <li>Sexual development throughout life</li> <li>Sexual health</li> <li>Sexual orientation</li> <li>Factors affecting sexuality</li> <li>Prevention of STIs, unwanted pregnancy, avoiding sexual harassment and abuse</li> <li>Dealing with inappropriate sexual behavior</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> </ul>	<ul style="list-style-type: none"> <li>Essay</li> <li>Short answer Objective type</li> </ul>
<b>XIV</b>	2(T) 4(SL)	Describe stress and adaptation	<p><b>C. Stress and Adaptation – Introductory concepts</b></p> <ul style="list-style-type: none"> <li>Introduction</li> <li>Sources, Effects, Indicators &amp; Types of Stress</li> <li>Types of stressors</li> <li>Stress Adaptation – General Adaptation Syndrome (GAS), Local Adaptation Syndrome (LAS)</li> <li>Manifestation of stress – Physical &amp; psychological</li> <li>Coping strategies/Mechanisms</li> <li>Stress Management               <ul style="list-style-type: none"> <li>Assist with coping and adaptation</li> <li>Creating therapeutic environment</li> </ul> </li> <li>Recreational and diversion therapies</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> </ul>	<ul style="list-style-type: none"> <li>Essay</li> <li>Short answer</li> <li>Objective type</li> </ul>
<b>XV</b>	6(T)	Explain culture and cultural norms	<p><b>D. Concepts of Cultural Diversity and Spirituality</b></p>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> </ul>	<ul style="list-style-type: none"> <li>Essay</li> <li>Short answer</li> </ul>





		Integrate cultural differences and spiritual needs in providing care to patients under supervision	<ul style="list-style-type: none"> <li>• Cultural diversity               <ul style="list-style-type: none"> <li>○ Cultural Concepts – Culture, Subculture, Multicultural, Diversity, Race, Acculturation, Assimilation</li> <li>○ Transcultural Nursing</li> <li>○ Cultural Competence</li> <li>○ Providing Culturally Responsive Care</li> </ul> </li> <li>• Spirituality               <ul style="list-style-type: none"> <li>○ Concepts – Faith, Hope, Religion, Spirituality, Spiritual Wellbeing</li> <li>○ Factors affecting Spirituality</li> <li>○ Spiritual Problems in Acute, Chronic, Terminal illnesses &amp; Near-Death Experience</li> </ul> </li> </ul> <p>Dealing with Spiritual Distress/Problems</p>		<ul style="list-style-type: none"> <li>• Objectivity type</li> </ul>
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Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
XVI	6(T)	Explain the significance of nursing theories	<p><b>Nursing Theories: Introduction</b></p> <ul style="list-style-type: none"> <li>• Meaning &amp; Definition, Purposes, Types of theories with examples, Overview of selected nursing theories – Nightingale, Orem, Roy</li> <li>• Use of theories in nursing practice</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objectivity type</li> </ul>

Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1, Pos-2/ Psos-1- Psos-13
COs 2	Pos-1, Pos-2/ Psos-1- Psos-13
Cos 3	Pos-1, Pos-2/ Psos-1- Psos-13
COs 4	Pos-1, Pos-2/ Psos-1- Psos-13
COs 5	Pos-1, Pos-2/ Psos-1- Psos-13
COs 6	Pos-1, Pos-2/ Psos-1- Psos-13
COs 7	Pos-1, Pos-2/ Psos-1- Psos-13
Cos 8	Pos-1, Pos-2/ Psos-1- Psos-13
Cos 9	Pos-1, Pos-2/ Psos-1- Psos-13
Cos 10	Pos-1, Pos-2/ Psos-1- Psos-13





<b>Cos 11</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 12</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 13</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 14</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 15</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 16</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>

**Reference Books:**

1. Barbara Kosler et al, “Fundamentals of Nursing concepts and procedure”, Addison Welsloy publishing Co., 13 th edition
2. Potter and perry, “Fundamentals of Nursing concepts-process and practice”, C.V Mosby
3. First Aid Manual, The authorized manual of St. John’s Ambulance, dorlingKindersly

**FNB120403- HEALTH/NURSING INFORMATICS & TECHNOLOGY**

**PLACEMENT:IISEMESTER**

**THEORY:2Credits(40hours)**

**PRACTICAL/LAB:1Credit(40hours)**

**DESCRIPTION:**Thiscourseisdesignedtoequipnovicenursingstudentswithknowledgeand skillsnecessary todeliverefficientinformatics-led health careservices.

**COMPETENCIES:**Oncompletionofthecourse,thestudentswillbeableto

1. Developabasicunderstandingofcomputerapplicationinpatientcareandnursingpractice.
2. Applytheknowledgeofcomputerandinformationtechnologyinpatientcareandnursing education,practice,administration andresearch.
3. Describetheprinciples ofhealthinformaticsandits useindevelopingefficienthealthcare.
4. Demonstratetheuseofinformation systeminhealthcareforpatientcareandutilization ofnursing data.
5. DemonstratetheknowledgeofusingElectronicHealthRecords(EHR)systeminclinicalpractice.
6. Applytheknowledgeofinteroperabilitystandardsinclinicalsetting.
7. Applytheknowledgeofinformationandcommunicationtechnologyinpublichealthpromotion.
8. UtilizethefunctionalitiesofNursingInformationSystem(NIS)systeminnursing.
9. Demonstratetheskills ofusingdatain managementofhealthcare.
10. Applytheknowledge oftheprinciplesofdigitalethicalandlegalissuesinclinicalpractice.





11. Utilize evidence-based practices in informatics and technology for providing quality patient care.
12. Update and utilize evidence-based practices in nursing education, administration, and practice.

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
	T	P/L				
I	10	15	Describe the importance of computer and technology in patient care and nursing practice	<b>Introduction to computer applications for patient care delivery system and nursing practice</b> <ul style="list-style-type: none"> <li>• Use of computers in teaching, learning, research and nursing practice</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Practice session</li> <li>• Supervised clinical practice on EHR use</li> <li>• Participate in data analysis using statistical package with statistician</li> </ul>	(T) <ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> <li>• Visit reports</li> <li>• Assessment of assignments</li> </ul>
			Demonstrate the use of computer and technology in patient care, nursing education, practice, administration and research.	<ul style="list-style-type: none"> <li>• Windows, MS Office: Word, Excel, PowerPoint</li> <li>• Internet</li> <li>• Literature research</li> <li>• Statistical packages</li> <li>• Hospital management information system</li> </ul>	<ul style="list-style-type: none"> <li>• Visit to hospitals with different hospital management systems</li> </ul>	(P) <ul style="list-style-type: none"> <li>• Assessment of skills using checklist</li> </ul>
II	4	5	Describe the principles of health informatics  Explain the ways data, knowledge and information can be used for effective healthcare	<b>Principles of Health Informatics</b> <ul style="list-style-type: none"> <li>• Health informatics – needs, objectives and limitations</li> <li>• Use of data, information and knowledge for more effective healthcare and better health</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Practical session</li> <li>• Work in groups with health informatics team in a hospital to extract nursing data and prepare report</li> </ul>	(T) <ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type questions</li> <li>• Assessment of report</li> </ul>





<b>III</b>	3	5	Describe the concepts of information system in health  Demonstrate the use of health information system in hospital setting	<b><u>Information Systems in Healthcare</u></b>  <ul style="list-style-type: none"> <li>• Introduction to the role and architecture of information systems in modern healthcare environments</li> <li>• Clinical Information System (CIS) / Hospital Information System (HIS)</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> <li>• Practical session</li> <li>• Work in groups with nurse leaders to understand the hospital information system</li> </ul>	(T)  <ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>
<b>IV</b>	4	4	Explain the use of electronic health records in nursing practice  Describe the latest trend in electronic health records standards and interoperability	<b><u>Shared Care &amp; Electronic Health Records</u></b>  <ul style="list-style-type: none"> <li>• Challenges of capturing rich patient histories in a computerable form</li> </ul> <p>Latest global developments and standards to enable life long electronic health records to be integrated from disparate systems.</p>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Practice on Simulated EHR system</li> <li>• Practical session</li> </ul> <p>Visit to health informatics department of a hospital to understand the use of EHR in nursing practice</p>	(T)  <ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type (P)</li> </ul> <p>Assessment of skills using checklist</p>

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
	T	P/L				
<b>V</b>	3		Describe the advantages and limitations of health informatics in maintaining patient safety and risk management	<b><u>Patient Safety &amp; Clinical Risk</u></b>  <ul style="list-style-type: none"> <li>• Relationship between patient safety and informatics</li> <li>• Function and application of the risk management process</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> </ul>	(T)  <ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>
<b>VI</b>	3	6	Explain the importance of knowledge management  Describe the standardized languages used in health informatics	<b><u>Clinical Knowledge &amp; Decision Making</u></b>  <ul style="list-style-type: none"> <li>• Role of knowledge management in improving decision-making in both the clinical and policy contexts</li> <li>• Systematized Nomenclature of Medicine, Clinical Terms, SNOMED CT to ICD-10-CM Map, standardized nursing terminologies (NANDA, NOC), Omaha system.</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> <li>• Practical session</li> <li>• Work in group to prepare a report on standardized languages used in health informatics.</li> </ul>	(T)  <ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>





<b>VII</b>	3		<p>Explain the use of information and communication technology in patient care</p> <p>Explain the application of public health informatics</p>	<p><b><u>eHealth: Patients and the Internet</u></b></p> <ul style="list-style-type: none"> <li>• Use of information and communication technology to improve enable personal and public healthcare</li> <li>• Introduction to public health informatics and role of nurses</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> </ul>	<ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> <li>• Practical exam</li> </ul>
<b>VIII</b>	3	5	<p>Describe the functions of nursing information system</p> <p>Explain the use of health care data in management of health care organization</p>	<p><b><u>Using Information in Healthcare Management</u></b></p> <ul style="list-style-type: none"> <li>• Components of Nursing Information System (NIS)</li> <li>• Evaluation, analysis and presentation of health care data to inform decisions in the management of health care organizations</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration on simulated NIS software</li> <li>• Visit to health informatics department of the hospital to understand use of health care data in decision making</li> </ul>	<p>(T)</p> <ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
	T	P/L				
<b>IX</b>	4		<p>Describe the ethical and legal issues in health care informatics</p> <p>Explains the ethical and legal issues related to nursing informatics</p>	<p><b><u>Information Law &amp; Governance in Clinical Practice</u></b></p> <ul style="list-style-type: none"> <li>• Ethical-legal issues pertaining to health care information in contemporary clinical practice</li> <li>Ethical-legal issues related to digital health applied to nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Case discussion</li> </ul> <p>Roleplay</p>	<p>(T)</p> <ul style="list-style-type: none"> <li>• Essay</li> <li>• Short answer</li> <li>• Objective type</li> </ul>





<b>X</b>	3	Explain the relevance of evidence-based practices in providing quality healthcare	<p><b><u>Healthcare Quality &amp; Evidence Based Practice</u></b></p> <ul style="list-style-type: none"> <li>Use of scientific evidence in improving the quality of healthcare and technical and professional informatics standards</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> <li>Case study</li> </ul>	<p>(T)</p> <ul style="list-style-type: none"> <li>Essay</li> <li>Short answer</li> <li>Objective type</li> </ul>
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Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1, Pos-2/ Psos-1- Psos-13
COs 2	Pos-1, Pos-2/ Psos-1- Psos-13
COs 3	Pos-1, Pos-2/ Psos-1- Psos-13
COs 4	Pos-1, Pos-2/ Psos-1- Psos-13
COs 5	Pos-1, Pos-2/ Psos-1- Psos-13
COs 6	Pos-1, Pos-2/ Psos-1- Psos-13
COs 7	Pos-1, Pos-2/ Psos-1- Psos-13





<b>Cos 8</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 9</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 10</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 11</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 12</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>

### Reference Books:

1. Brunner and Suddarth's, Text Book of Medical Surgical Nursing, 9<sup>th</sup> edition, 2005, Lippincott, Raven Publishers.
2. Jayce M. Black, Jane Hokanson Hawks, Medical Surgical Nursing- Clinical Mangement for positive outcomes, 7th edition, 2005, Elsevier, India.

## FNB130401- APPLIED MICROBIOLOGY

**THEORY:**20hours

**PRACTICAL:**20hours(Lab/ExperientialLearning–L/E)

**DESCRIPTION:** This course is designed to enable students to acquire understanding



**Faculty of Nursing**  
**Gokul Nursing College**





of fundamentals of Microbiology, compare and contrast different microbes and comprehend the means of transmission and control of spread by various microorganisms. It also provides opportunities for practicing infection control measures in hospital and community settings.

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

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

Unit	Time(Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
	T	P				
I	3		Explain concepts and principles of microbiology and its importance in nursing	<b>Introduction:</b> <ul style="list-style-type: none"> <li>• Importance and relevance to nursing</li> <li>• Historical perspective</li> <li>• Concepts and terminology</li> <li>• Principles of microbiology</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>





II	10	10(L/E)	Describe structure, classification morphology and growth of bacteria  Identify Microorganisms	<b>General characteristics of Microbes:</b> <ul style="list-style-type: none"> <li>• Structure and classification of Microbes</li> <li>• Morphological types</li> <li>• Size and form of bacteria</li> <li>• Motility</li> <li>• Colonization</li> <li>• Growth and nutrition of microbes</li> <li>• Temperature</li> <li>• Moisture</li> <li>• Blood and body fluids</li> <li>• Laboratory methods for identification of Microorganisms</li> <li>• Types of Staining – simple, differential (Gram's, AFB), special – capsular staining (negative), spore, LPCB, KOH mount.</li> <li>• Culture and media preparation – solid and liquid. Types of media – semi synthetic, synthetic, enriched, enrichment, selective and differential media. Pure culture techniques – tube dilution, pour, spread, streak plate. Anaerobic cultivation of bacteria</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Demonstration</li> <li>• Experiential Learning through visual</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>
III	4	6(L/E)	Describe the different disease producing organisms	<b>Pathogenic organisms</b> <ul style="list-style-type: none"> <li>• Micro-organisms: Cocci – gram positive and gram negative; Bacilli – gram positive and gram negative</li> <li>• Viruses</li> <li>• Fungi: Superficial and Deep mycoses</li> <li>• Parasites</li> <li>• Rodents &amp; Vectors <ul style="list-style-type: none"> <li>○ Characteristics, Source, portal of entry, transmission of infection, Identification of disease producing micro-organisms</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Demonstration</li> <li>• Experiential learning through visual</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>
IV	3	4(L/E)	Explain the concept of immunity, hypersensitivity and immunization	<b>Immunity</b> <ul style="list-style-type: none"> <li>• Immunity: Types, classification</li> <li>• Antigen and antibody reaction</li> <li>• Hypersensitivity reactions</li> <li>• Serological tests</li> <li>• Immunoglobulins: Structure, types &amp; p</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> <li>• Visit to observe vaccine storage</li> <li>• Clinical practice</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> <li>• Visit report</li> </ul>





			roperties • Vaccines: Types & classification, storage and handling, cold chain, Immunization for various diseases Immunization Schedule		
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Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1, Pos-2/ Psos-1- Psos-13
COs 2	Pos-1, Pos-2/ Psos-1- Psos-13
COs 3	Pos-1, Pos-2/ Psos-1- Psos-13
COs 4	Pos-1, Pos-2/ Psos-1- Psos-13
COs 5	Pos-1, Pos-2/ Psos-1- Psos-13
COs 6	Pos-1, Pos-2/ Psos-1- Psos-13
COs 7	Pos-1, Pos-2/ Psos-1- Psos-13

**Reference Books:**





1. Dr. PHBS Sharma, A textbook of microbiology, S. Vikas & Company publication, 1<sup>st</sup> edition-2015.
2. Dr. Preeti Agarwal, Vinod Gopta, Appliedmicrobiology infection control, jain publication, 1<sup>st</sup> edition-2022

## **FNB130401- INFECTION CONTROL INCLUDING SAFETY**

**THEORY:**20hours

**PRACTICAL/LAB:**20hours(Lab/ExperientialLearning–L/E)

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

**COMPETENCIES:** The students will be able to:





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

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
	T	P				
I	2	2(E)	Summarize the evidence based and effective patient care practices for the prevention of common health care associated infections in the health care setting	<b>HAI (Hospital acquired Infection)</b> <ul style="list-style-type: none"> <li>• Hospital acquired infection</li> <li>• Bundle approach               <ul style="list-style-type: none"> <li>- Prevention of Urinary Tract Infection (UTI)</li> <li>- Prevention of Surgical Site Infection (SSI)</li> <li>- Prevention of Ventilator Associated events (VAE)</li> <li>- Prevention of Central Line Associated Blood Stream Infection (CLABSI)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lecture &amp; Discussion</li> <li>• Experiential learning</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge assessment</li> <li>• MCQ</li> <li>• Short answer</li> </ul>





				- Surveillance of HAI – Infection control team & Infection control committee		
<b>II</b>	3	4(L)	Demonstrate appropriate use of different types of PPEs and the critical use of risk assessment	<b>Isolation Precautions and use of Personal Protective Equipment (PPE)</b> <ul style="list-style-type: none"> <li>Types of isolation system, standard precaution and transmission-based precautions (Direct Contact, Droplet, Indirect)</li> <li>Epidemiology &amp; Infection prevention – CDC guidelines</li> <li>Effective use of PPE</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Demonstration &amp; Re-demonstration</li> </ul>	<ul style="list-style-type: none"> <li>Performance assessment</li> <li>OSCE</li> </ul>
<b>III</b>	1	2(L)	Demonstrate the hand hygiene practice and its effectiveness on infection control	<b>Hand Hygiene</b> <ul style="list-style-type: none"> <li>Types of Hand hygiene.</li> <li>Hand washing and use of alcohol hand rub</li> <li>Moments of Hand Hygiene</li> <li>WHO hand hygiene promotion</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Demonstration &amp; Re-demonstration</li> </ul>	<ul style="list-style-type: none"> <li>Performance assessment</li> </ul>
<b>IV</b>	1	2(E)	Illustrates disinfection and sterilization in the health care setting	<b>Disinfection and sterilization</b> <ul style="list-style-type: none"> <li>Definitions</li> <li>Types of disinfection and sterilization</li> <li>Environment cleaning</li> <li>Equipment Cleaning</li> <li>Guides on use of disinfectants</li> <li>Spaulding's principle</li> </ul>	<ul style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> <li>Experiential learning through visit</li> </ul>	<ul style="list-style-type: none"> <li>Short answer</li> <li>Objectivity type</li> </ul>

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





V	1		Illustrate on what, when, how, why specimens are collected to optimize the diagnosis for treatment and management.	<b>Specimen Collection (Review)</b> <ul style="list-style-type: none"> <li>• Principle of specimen collection</li> <li>• Types of specimens</li> <li>• Collection techniques and special considerations</li> <li>• Appropriate containers</li> <li>• Transportation of the sample</li> <li>• Staff precautions in handling specimens</li> </ul>	Discussion	<ul style="list-style-type: none"> <li>• Knowledge evaluation</li> <li>• Quiz</li> <li>• Performance assessment Checklist</li> </ul>
VI	2	2(E)	Explain on BioMedical waste management & laundry management	<b>BMW (BioMedical Waste Management)</b> <i>Laundry management process and infection control and prevention</i> <ul style="list-style-type: none"> <li>• Waste management process and infection prevention</li> <li>• Staff precautions</li> <li>• Laundry management</li> <li>Country ordinance and BMW National guidelines 2017: Segregation of wastes, Colour coded waste containers, waste collection &amp; storage, Packaging &amp; labeling, Transportation</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Demonstration</li> <li>• Experiential learning through visit</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge assessment by short answers, objective type</li> <li>• Performance</li> <li>• Assessment</li> </ul>
VII	2		Explain in detail about Antibiotic stewardship, AMR  Describe MRSA / MDRO and its prevention	<b>Antibiotic stewardship</b> <ul style="list-style-type: none"> <li>• Importance of Antibiotic Stewardship</li> <li>• Anti-Microbial Resistance</li> <li>Prevention of MRSA, MDRO in healthcare setting</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Written assignment</li> <li>• –Recent AMR (Antimicrobial resistance) guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> <li>• Assessment of assignment</li> </ul>

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





VIII	3	5(L/E)	<p>Enlist the patientsafety indicatorsfollow ed in ahealth careorganization andthe role of nursein the patientsafety auditprocess</p> <p>Captures andanalyzesincid ents andevents forqualityimprovement</p>	<p><b>PatientSafetyIndicators</b></p> <ul style="list-style-type: none"> <li>• CareofVulnerablepatients</li> <li>• Prevention ofIatrogenicinjury</li> <li>• Careofflines, drainsandtubing’s</li> <li>• Restrainpolicyandcare– PhysicalandChemical</li> <li>• Blood&amp;bloodtransfusionpolicy</li> <li>• PreventionofIVComplication</li> <li>• PreventionofFall</li> <li>• PreventionofDVT</li> <li>• Shiftingandtransportingofpatients</li> <li>• Surgicalsafety</li> <li>• Carecoordinationeventrelatedtom edication reconciliation andadministration</li> <li>• Preventionofcommunicationerrors</li> <li>• PreventionofHAI</li> <li>• Documentation</li> </ul> <p><b>IncidentsandadverseEvents</b></p> <ul style="list-style-type: none"> <li>• Capturingofincidents</li> <li>• RCA(RootCauseAnalysis)</li> <li>• CAPA(CorrectiveandPreventive Action)</li> <li>• Reportwriting</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Demonstration</li> <li>• Experiential learning</li> </ul> <p>Lecture</p> <ul style="list-style-type: none"> <li>• Roleplay Inquiry BasedLearning</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge assessment</li> <li>• Performance assessment</li> <li>• Checklist/OSCE</li> <li>• Objectivetype</li> </ul> <ul style="list-style-type: none"> <li>• Knowledge assessment Shortanswer</li> </ul>
IX	1		<p>Enumerate IPSGand applicationof the goals inthe patient caresettings.</p>	<p><b>IPSG(InternationalPatientsafety Goals)</b></p> <ul style="list-style-type: none"> <li>• Identifypatientcorrectly</li> <li>• Improveeffectivecommunication</li> <li>• ImprovesafetyofHighAlertmedication</li> <li>• Ensuresafesurgery</li> <li>• Reducetheriskofhealthcareassociated infection</li> <li>• Reduce the risk of patient harmresultingfromfalls</li> </ul> <p>Reducetheharmassociatedwithclinicalalarmsystem</p>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Roleplay</li> </ul>	<ul style="list-style-type: none"> <li>• Objectivetype</li> </ul>

Unit	Time(Hrs)	Learning	Content	Teaching/Learning	Assessment
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	T	P	Outcomes	Activities	Methods	
X	2	3(L/E)	Enumerate the various safety protocols and its applications	<b>Safety protocol</b> <ul style="list-style-type: none"> <li>• 5S (Sort, Set in order, Shine, Standardize, Sustain)</li> <li>• Radiations safety</li> <li>• Lasers safety</li> <li>• Fires safety               <ul style="list-style-type: none"> <li>- Types and classification of fire</li> <li>- Fire alarms</li> <li>- Fire fighting equipment</li> </ul> </li> <li>• HAZMAT (Hazardous Materials) safety               <ul style="list-style-type: none"> <li>- Types of spill</li> <li>- Spillage management</li> <li>- MSDS (Material Safety Data Sheets)</li> </ul> </li> <li>• Environmental safety               <ul style="list-style-type: none"> <li>- Risk assessment</li> <li>- Aspect impact analysis</li> <li>- Maintenance of Temp and Humidity (Department wise)</li> <li>- Audits</li> </ul> </li> <li>• Emergency Codes</li> </ul> Role of Nurse in times of disaster	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Demonstration/Experiential learning</li> </ul>	<ul style="list-style-type: none"> <li>• Mockdrills</li> <li>• Posttests Checklist</li> </ul>
XI	2		Explain importance of employee safety indicators  Identify risk of occupational hazards, prevention and post exposure prophylaxis.	<b>Employee Safety Indicators</b> <ul style="list-style-type: none"> <li>• Vaccination</li> <li>• Needlestick injuries (NSI) prevention</li> <li>• Fall prevention</li> <li>• Radiations safety</li> <li>• Annual health check</li> </ul> <b>Healthcare Worker Immunization Program and management of occupational exposure</b> <ul style="list-style-type: none"> <li>• Occupational health ordinance</li> <li>• Vaccination program for healthcare staff</li> </ul> Needlestick injuries and prevention and post exposure prophylaxis	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Lecture method</li> <li>• Journal review</li> </ul>	Knowledge assessment by short answers, objective type  <ul style="list-style-type: none"> <li>• Short answer</li> </ul>

Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):





<b>COs</b>	<b>POs/ PSOs</b>
<b>COs 1</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>COs 2</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 3</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>COs 4</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>COs 5</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>COs 6</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>COs 7</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 8</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 9</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 10</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>
<b>Cos 11</b>	<b>Pos-1,Pos-2/Psos-1-Psos-13</b>

### Reference Books:

1. Dr. Preeti Agarwal, Vinod Gopta, Appliedmicrobiology infection control safety, jain publication, 1<sup>st</sup> edition-2022
2. Dr. ImtiyazWani, Poonam Batra, A textbook of infection control & safety, S. Vikas & company medical publication, 1<sup>st</sup> edition- 2023

## FNB130402- PHARMACOLOGY-I



Faculty of Nursing  
**Gokul Nursing College**





**PLACEMENT:III SEMESTER**

**THEORY:1 Credit(20 hours)**

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

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

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

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
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<b>I</b>	3(T)	Describe Pharmacodynamics, Pharmacokinetics, Classification, principles of administration of drugs	<b>Introduction to Pharmacology</b> <ul style="list-style-type: none"> <li>• Definitions &amp; Branches</li> <li>• Nature &amp; Sources of drugs</li> <li>• Dosage Forms and Routes of drug administration</li> <li>• Terminology used</li> <li>• Classification, Abbreviations, Prescription, Drug Calculation, Weights and Measures</li> <li>• <i>Pharmacodynamics</i>: Actions, Drug Antagonism, Synergism, Tolerance, Receptors, Therapeutic, adverse, toxic effects, pharmacovigilance</li> <li>• <i>Pharmacokinetics</i>: Absorption, Bioavailability, Distribution, Metabolism, Interaction, Excretion</li> <li>• Review: Principles of drug administration and treatment individualization               <ul style="list-style-type: none"> <li>◦ Factors affecting dose, route etc.</li> </ul> </li> <li>• Indian Pharmacopoeia: Legal Issues, Drug Laws, Schedule Drugs</li> <li>• Rational Use of Drugs</li> <li>• Principles of Therapeutics</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Guided reading and written assignment on schedule K drugs</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> <li>• Assessment of assignments</li> </ul>
<b>II</b>	1(T)	Describe antiseptics, and disinfectant & nurse's responsibilities	<b>Pharmacology of commonly used antiseptics and disinfectants</b> <ul style="list-style-type: none"> <li>• Antiseptics and Disinfectants</li> <li>• Composition, action, dosage, route, indications, contraindications, Drug interactions, side effects, adverse effects, toxicity and role of nurse</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Drug study/presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>
<b>III</b>	2(T)	Describe drugs acting on gastrointestinal system & nurse's responsibilities	<b>Drugs acting on G.I. system</b> <ul style="list-style-type: none"> <li>• Pharmacology of commonly used drugs               <ul style="list-style-type: none"> <li>◦ Emetics and Antiemetics</li> <li>◦ Laxatives and Purgatives</li> <li>◦ Antacids and antipeptic ulcer drugs</li> <li>◦ Anti-diarrhoeals – Fluid and electrolyte therapy, Furazolidone, dicyclomine</li> </ul> </li> <li>• Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Drug study/presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
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IV	2(T)	Describe drugs acting on respiratory system & nurse's responsibilities	<p><b>Drugs acting on respiratory system</b></p> <ul style="list-style-type: none"> <li>• Pharmacology of commonly used               <ul style="list-style-type: none"> <li>○ Antiasthmatics – Bronchodilators (Salbutamol inhalers)</li> <li>○ Decongestants</li> <li>○ Expectorants, Antitussives and Mucolytics</li> <li>○ Broncho-constrictors and Antihistamines</li> </ul> </li> <li>• Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Drug study/presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>
V	4(T)	Describe drugs used on cardio-vascular system & nurse's responsibilities	<p><b>Drugs used in treatment of Cardiovascular system and blood disorders</b></p> <ul style="list-style-type: none"> <li>• Haematinics, &amp; treatment of anaemia and antiadrenergics</li> <li>• Cholinergic and anticholinergic</li> <li>• Adrenergic Drugs for CHF &amp; vasodilators</li> <li>• Antianginals</li> <li>• Antiarrhythmics</li> <li>• Antihypertensives</li> <li>• Coagulants &amp; Anticoagulants</li> <li>• Antiplatelets &amp; thrombolytics</li> <li>• Hypolipidemics</li> <li>• Plasma expanders &amp; treatment of shock</li> <li>• Drugs used to treat blood disorders</li> <li>• Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Drug study/presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
VI	2(T)	Describe the drugs used in treatment of endocrine system disorders	<b>Drugs used in treatment of endocrine system disorders</b> <ul style="list-style-type: none"> <li>• Insulin &amp; oral hypoglycemics</li> <li>• Thyroid and anti-thyroid drugs</li> <li>• Steroids               <ul style="list-style-type: none"> <li>○ Corticosteroids</li> <li>○ Anabolic steroids</li> </ul> </li> <li>• Calcitonin, parathormone, vitamin D3, calcium metabolism</li> <li>• Calcium salts</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Drug study/presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>
VII	1(T)	Describe drugs used in skin diseases & nurse's responsibilities	<b>Drugs used in treatment of integumentary system</b> <ul style="list-style-type: none"> <li>• Antihistaminics and antipruritics</li> <li>• Topical applications for skin- Benzylbenzoate, Gamma BHC, Clotrimazole, Miconazole, Silver Sulphadiazine (burns)</li> </ul> Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Drug study/presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>
VIII	5(T)	Explain drug therapy/chemotherapy of specific infections & infestations & nurse's responsibilities	<b>Drugs used in treatment of communicable diseases (common infections, infestations)</b> <ul style="list-style-type: none"> <li>• General Principles for use of Antimicrobials</li> <li>• Pharmacology of commonly used drugs:               <ul style="list-style-type: none"> <li>○ Penicillin, Cephalosporin's, Aminoglycosides, Macrolide &amp; broad spectrum antibiotics, Sulfonamides, quinolones, Misc. antimicrobials</li> </ul> </li> <li>• Anaerobic infections</li> <li>• Antitubercular drugs,</li> <li>• Antileprosy drugs</li> <li>• Antimalarials</li> <li>• Antiretroviral drugs</li> <li>• Antiviral agents</li> <li>• Anthelmintics, Antiscabies agents</li> <li>• Antifungal agents</li> </ul> Composition, action, dosage, route, indications, contraindications, Drug interactions, side effects, adverse effects, toxicity and role of nurse	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Drug study/presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>





Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1,Pos-2/Psos-1-Psos-13
COs 2	Pos-1,Pos-2/Psos-1-Psos-13
Cos 3	Pos-1,Pos-2/Psos-1-Psos-13
COs 4	Pos-1,Pos-2/Psos-1-Psos-13
COs 5	Pos-1,Pos-2/Psos-1-Psos-13
COs 6	Pos-1,Pos-2/Psos-1-Psos-13
COs 7	Pos-1,Pos-2/Psos-1-Psos-13
COs 8	Pos-1,Pos-2/Psos-1-Psos-13

### Reference Books:

1. Suresh Sharma, Textbook of pharma & pathology for nurses-I, Jaypee publication, 2<sup>nd</sup> edition-2022.
2. Suresh Sharma, Textbook of pharma & pathology for nurses-II, Jaypee publication, 2<sup>nd</sup> edition- 2022.





## **FNB130402- PATHOLOGY-I**

**PLACEMENT: III SEMESTER**

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

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

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

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





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
I	8(T)	<p>Define the common terms used in pathology</p> <p>Identify the deviations from normal to abnormal structure and functions of body system</p>	<p><b>Introduction</b></p> <ul style="list-style-type: none"> <li>• Importance of the study of pathology</li> <li>• Definition of terms in pathology</li> <li>• Cell injury: Etiology, pathogenesis of reversible and irreversible cell injury, Necrosis, Gangrene</li> <li>• Cellular adaptations: Atrophy, Hypertrophy, Hyperplasia, Metaplasia, Dysplasia, Apoptosis</li> <li>• Inflammation:               <ul style="list-style-type: none"> <li>○ Acute inflammation (Vascular and Cellular events, systemic effects of acute inflammation)</li> <li>○ Chronic inflammation (Granulomatous inflammation, systemic effects of chronic inflammation)</li> </ul> </li> <li>• Wound healing</li> <li>• Neoplasia: Nomenclature, Normal and Cancer cell, Benign and malignant tumors, Carcinoma in situ, Tumor metastasis: general mechanism, routes of spread and examples of each route</li> <li>• Circulatory disturbances: Thrombosis, embolism, shock</li> <li>• Disturbance of body fluids and electrolytes: Edema, Transudates and Exudates</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Explain using slides</li> <li>• Explain with clinical scenarios</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>
II	5(T)	<p>Explain pathological changes in disease conditions of various systems</p>	<p><b>Special Pathology</b></p> <p><b>Pathological changes in disease conditions of selected systems:</b></p> <p><b>1. Respiratory system</b></p> <ul style="list-style-type: none"> <li>• Pulmonary infections: Pneumonia, Lung abscess, pulmonary tuberculosis</li> <li>• Chronic Obstructive Pulmonary Disease: Chronic bronchitis, Emphysema, Bronchial Asthma, Bronchiectasis</li> <li>• Tumors of Lungs</li> </ul> <p><b>2. Cardio-vascular system</b></p> <ul style="list-style-type: none"> <li>• Atherosclerosis</li> <li>• Ischemia and Infarction.</li> <li>• Rheumatic Heart Disease</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Explain using slides, X-rays and scans</li> <li>• Visit to pathology lab, endoscopy unit and OT</li> </ul>	<ul style="list-style-type: none"> <li>• Short answer</li> <li>• Objective type</li> </ul>





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
			<ul style="list-style-type: none"> <li>• Infective endocarditis</li> </ul> <p><b>3. Gastrointestinal tract</b></p> <ul style="list-style-type: none"> <li>• Peptic ulcer disease (Gastric and Duodenal ulcer)</li> <li>• Gastritis-HPylori infection</li> <li>• Oral mucosa: Oral Leukoplakia, Squamous cell carcinoma</li> <li>• Esophageal cancer</li> <li>• Gastric cancer</li> <li>• Intestinal: Typhoid ulcer, Inflammatory Bowel Disease (Crohn's disease and Ulcerative colitis), Colorectal cancer</li> </ul> <p><b>4. Liver, Gallbladder and Pancreas</b></p> <ul style="list-style-type: none"> <li>• Liver: Hepatitis, Amoebic Liver abscess, Cirrhosis of Liver</li> <li>• Gallbladder: Cholecystitis.</li> <li>• Pancreas: Pancreatitis</li> <li>• Tumors of liver, Gallbladder and Pancreas</li> </ul> <p><b>5. Skeletal system</b></p> <ul style="list-style-type: none"> <li>• Bone: Bone healing, Osteoporosis, Osteomyelitis, Tumors</li> <li>• Joints: Arthritis - Rheumatoid arthritis and Osteoarthritis</li> </ul> <p><b>6. Endocrine system</b></p> <ul style="list-style-type: none"> <li>• Diabetes Mellitus</li> <li>• Goitre</li> <li>• Carcinoma thyroid</li> </ul>		
III	7(T)	Describe various laboratory tests in assessment and monitor in gof disease conditions	<p><b>Hematological tests for the diagnosis of blood disorders</b></p> <ul style="list-style-type: none"> <li>• Blood tests: Hemoglobin, White cell and platelet counts, PCV, ESR</li> <li>• Coagulation tests: Bleeding time (BT), Prothrombin time (PT), Activated Partial Prothrombin Time (APTT)</li> <li>• Blood chemistry</li> <li>• Blood bank: <ul style="list-style-type: none"> <li>○ Blood grouping and cross matching</li> <li>○ Blood components</li> <li>○ Plasmapheresis</li> <li>○ Transfusion reactions</li> </ul> </li> </ul> <p><b>Note:</b> Few lab hours can be planned for observation and visits (Less than 1 credit, lab hours are not specified separately)</p>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> </ul> <p>Visit to clinical lab, biochemistry lab and blood bank</p>	<ul style="list-style-type: none"> <li>• Short answer Objective type</li> </ul>





Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1,Pos-2/Psos-1-Psos-13
COs 2	Pos-1,Pos-2/Psos-1-Psos-13
Cos 3	Pos-1,Pos-2/Psos-1-Psos-13
COs 4	Pos-1,Pos-2/Psos-1-Psos-13
COs 5	Pos-1,Pos-2/Psos-1-Psos-13
COs 6	Pos-1,Pos-2/Psos-1-Psos-13
COs 7	Pos-1,Pos-2/Psos-1-Psos-13

### Reference Books:

1. Rimpi Bansal, Davinder Kaur, Textbook of pathology & genetics, Vision health sciences publication, 1<sup>st</sup> edition, 2021
2. Suresh Sharma, Textbook of pharma & pathology for nurses-I, Jaypee publication, 2<sup>nd</sup> edition-2022.





## **FNB130403- ADULT HEALTH NURSING-I**

**PLACEMENT: III SEMESTER**

**THEORY: 7 Credits (140 hours)**

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

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

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

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

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activ	Assessment Methods
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				<b>ities</b>	
I	6(T) 4(L/SL)	<p>Narrate the evolution of medical surgical nursing</p> <p>Apply nursing process in caring for patients with medical surgical problems</p> <p>Execute the role of a nurse in various medical surgical setting</p> <p>Develop skills in assessment and care of wound</p>	<p><b>Introduction</b></p> <ul style="list-style-type: none"> <li>• Evolution and trends of medical and surgical nursing</li> <li>• International classification of diseases</li> <li>• Roles and responsibility of a nurse in medical and surgical settings               <ul style="list-style-type: none"> <li>○ Outpatient department</li> <li>○ In-patient unit</li> <li>○ Intensive care unit</li> </ul> </li> <li>• Introduction to medical and surgical aspects               <ul style="list-style-type: none"> <li>○ Inflammation, infection</li> <li>○ Wound healing – stages, influencing factors</li> </ul> </li> <li>• Wound care and dressing technique</li> <li>• Care of surgical patient               <ul style="list-style-type: none"> <li>○ pre-operative</li> <li>○ post-operative</li> <li>○ Alternative therapies used in caring for patients with Medical Surgical Disorders</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum discussion</li> <li>• Demonstration &amp; Practices session</li> <li>• Roleplay</li> <li>• Visit to outpatient department, inpatient and intensive care unit</li> </ul>	<ul style="list-style-type: none"> <li>• Short Answer</li> <li>• OSCE</li> </ul>
II	15(T) 4(L/SL)	<p>Explain organizational set up of the operating theatre</p> <p>Differentiate the role of scrub nurse and circulating nurse</p> <p>Describe the different positioning for various surgeries</p> <p>Apply principles of asepsis in handling the sterile equipment</p> <p>Demonstrate skill in scrubbing procedures</p> <p>Demonstrate skill in assessing the patient and document accurately the surgical safety checklist</p> <p>Develop skill in assisting with selected surgeries</p> <p>Explain the types, functions, and nursing considerations for different types of anaesthesia</p>	<p><b>Intraoperative Care</b></p> <ul style="list-style-type: none"> <li>• Organization and physical setup of the operation theatre               <ul style="list-style-type: none"> <li>○ Classification</li> <li>○ O.T Design</li> <li>○ Staffing</li> <li>○ Members of the OT team</li> <li>○ Duties and responsibilities of the nurse in OT</li> </ul> </li> <li>• Position and draping for common surgical procedures</li> <li>• Instruments, sutures and suture materials, equipment for common surgical procedures</li> <li>• Disinfection and sterilization of equipment</li> <li>• Preparation of sets for common surgical procedures</li> <li>• Scrubbing procedures – Gowning, masking and gloving</li> <li>• Monitoring the patient during the procedures</li> <li>• Maintenance of the therapeutic</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture cum Discussion</li> <li>• Demonstration, Practice session, and Case Discussion</li> <li>• Visit to receiving bay</li> </ul>	<ul style="list-style-type: none"> <li>• Caring for patient intraoperatively</li> <li>• Submittal of disinfectants used for instruments with the action and precaution</li> </ul>





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
			environment in OT <ul style="list-style-type: none"> <li>Assisting in major and minor operation, handling specimen</li> <li>Prevention of accidents and hazards in OT</li> <li>Anaesthesia – types, methods of administration, effects and stages, equipment &amp; drugs</li> </ul> Legal aspects		
<b>III</b>	6(T) 4(L/S L)	Identify the signs and symptoms of shock and electrolyte imbalances  Develop skills in managing fluid and electrolyte imbalances	<b>Nursing care of patients with common signs and symptoms and management</b> <ul style="list-style-type: none"> <li>Fluid and electrolyte imbalance</li> <li>Shock</li> <li>Pain</li> </ul>	<ul style="list-style-type: none"> <li>Lecture, discussion, demonstration</li> <li>Case discussion</li> </ul>	<ul style="list-style-type: none"> <li>Short answer</li> <li>MCQ</li> <li>Case report</li> </ul>
<b>IV</b>	18(T) 4(L)	Demonstrates skill in respiratory assessment  Differentiates different breath sounds and lists the indications  Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of common respiratory problems  Describe the health behaviour to be adopted in preventing respiratory illnesses	<b>Nursing Management of patients with respiratory problems</b> <ul style="list-style-type: none"> <li>Review of anatomy and physiology of respiratory system</li> <li>Nursing Assessment – history taking, physical assessment and diagnostic tests</li> <li>Common respiratory problems:               <ul style="list-style-type: none"> <li>Upper respiratory tract infections</li> <li>Chronic obstructive pulmonary diseases</li> <li>Pleural effusion, Empyema</li> <li>Bronchiectasis</li> <li>Pneumonia</li> <li>Lung abscess</li> <li>Cyst and tumors</li> <li>Chest Injuries</li> <li>Acute respiratory distress syndrome</li> <li>Pulmonary embolism</li> </ul> </li> </ul> Health behaviour to prevent respiratory illness	<ul style="list-style-type: none"> <li>Lecture, discussion,</li> <li>Demonstration</li> <li>Practical session</li> <li>Case presentation</li> <li>Visit to PFT Lab</li> </ul>	<ul style="list-style-type: none"> <li>Essay</li> <li>Short answer</li> <li>OSCE</li> </ul>





Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
V	16(T) 5(L)	<p>Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of gastrointestinal disorders</p> <p>Demonstrate skill in gastrointestinal assessment</p> <p>Prepare patient for upper and lower gastrointestinal investigations</p> <p>Demonstrate skill in gastric decompression, gavage, and stomach care</p> <p>Demonstrate skill in different feeding techniques</p>	<p><b>Nursing Management of patients with disorders of digestive system</b></p> <ul style="list-style-type: none"> <li>Review of anatomy and physiology of GI system</li> <li>Nursing assessment – History and physical assessment</li> <li>GI investigations</li> <li>Common GI disorders:               <ul style="list-style-type: none"> <li>Oral cavity: lips, gums and teeth</li> <li>GI: Bleeding, Infections, Inflammation, tumors, Obstruction, Perforation &amp; Peritonitis</li> <li>Peptic &amp; duodenal ulcer,</li> <li>Mal-absorption, Appendicitis, Hernias</li> <li>Hemorrhoids, fissures, Fistulas</li> </ul> </li> <li>Pancreas: inflammation, cysts, and tumors</li> <li>Liver: inflammation, cysts, abscess, cirrhosis, portal hypertension, hepatic failure, tumors</li> <li>Gall bladder: inflammation, Cholelithiasis, tumors</li> <li>Gastric decompression, gavage and stomach care, different feeding techniques</li> <li>Alternative therapies, drugs used in treatment of disorders of digestive system</li> </ul>	<ul style="list-style-type: none"> <li>Lecture, Discussion</li> <li>Demonstration,</li> <li>Roleplay</li> <li>Problem Based Learning</li> <li>Visit to stomach clinic</li> </ul>	<ul style="list-style-type: none"> <li>Short answer</li> <li>Quiz</li> <li>OSCE</li> </ul>
VI	20(T) 5(L)	<p>Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of cardiovascular disorders</p>	<p><b>Nursing Management of patients with cardiovascular problems</b></p> <ul style="list-style-type: none"> <li>Review of anatomy and physiology of cardiovascular system</li> <li>Nursing Assessment: History and physical assessment</li> <li>Invasive &amp; non-invasive</li> </ul>	<ul style="list-style-type: none"> <li>Lecture, discussion</li> <li>Demonstration</li> <li>Practical session</li> <li>Case Discussion</li> <li>Health education</li> <li>Drug Book/Prese</li> </ul>	<ul style="list-style-type: none"> <li>Care plan</li> <li>Drug record</li> </ul>





		Demonstrates skill in cardiovascular assessment	cardiac procedures <ul style="list-style-type: none"> <li>Disorders of vascular system- Hypertension, arteriosclerosis, Raynaud's disease, aneurysms and peripheral vascular disorders</li> </ul>	ntation <ul style="list-style-type: none"> <li><b>Completion of BCLS Module</b></li> </ul>	<ul style="list-style-type: none"> <li>BLS/ BCLSeva</li> </ul>
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Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
		Prepare patient for invasive and non-invasive cardiac procedures  Demonstrate skill in monitoring and interpreting clinical signs related to cardiac disorders  Complete BLS/BCLS module	<ul style="list-style-type: none"> <li>Coronary artery diseases: coronary atherosclerosis, Angina pectoris, myocardial infarction</li> <li>Valvular disorders: congenital and acquired</li> <li>Rheumatic heart disease: pericarditis, myocarditis, endocarditis, cardiomyopathies</li> <li>Cardiac dysrhythmias, heart block</li> <li>Congestive heart failure, cor pulmonale, pulmonary edema, cardiogenic shock, cardiac tamponade</li> <li>Cardiopulmonary arrest</li> </ul>		
<b>VII</b>	7(T) 3(L)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of hematological disorders  Interpret blood reports	<b>Nursing Management of patients with disorders of blood</b> <ul style="list-style-type: none"> <li>Review of Anatomy and Physiology of blood</li> <li>Nursing assessment: history, physical assessment &amp; Diagnostic tests</li> <li>Anemia, Polycythemia</li> <li>Bleeding Disorders: clotting factor defects and platelets defects, thalassemia, leukemia, leukopenia, agranulocytosis</li> <li>Lymphomas, myelomas</li> </ul>	<ul style="list-style-type: none"> <li>Field visit to blood bank</li> <li>Counseling</li> </ul>	<ul style="list-style-type: none"> <li>Interpretation of blood reports</li> <li>Visit report</li> </ul>
<b>VIII</b>	8(T) 2(L)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of endocrine disorders	<b>Nursing management of patients with disorders of endocrine system</b> <ul style="list-style-type: none"> <li>Review of anatomy and physiology of endocrine system</li> <li>Nursing Assessment – History and Physical assessment</li> <li>Disorders of thyroid</li> </ul>	<ul style="list-style-type: none"> <li>Lecture, discussion, demonstration</li> <li>Practical session</li> <li>Case Discussion</li> <li>Health education</li> </ul>	<ul style="list-style-type: none"> <li>Prepare health education on self-administration of insulin</li> <li>Submits diabetic diet plan</li> </ul>





		Demonstrate skill in assessment of endocrine organ dysfunction	and Parathyroid, Adrenal and Pituitary (Hyper, Hypo, tumors) Diabetes mellitus		
		Prepare and provide health education on diabetic diet			

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
IX	8(T) 2(L)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of disorders of integumentary system  Demonstrate skill in integumentary assessment  Demonstrate skill in medicated bath Prepare and provide health education on skin care	<b>Nursing management of patients with disorders of Integumentary system</b> <ul style="list-style-type: none"> <li>Review of anatomy and physiology of skin</li> <li>Nursing Assessment: History and physical assessment</li> <li>Infection and infestations; Dermatitis</li> <li>Dermatoses; infectious and Non-infectious</li> <li>Acne, Allergies, Eczema &amp; Pemphigus</li> <li>Psoriasis, Malignant melanoma, Alopecia</li> <li>Special therapies, alternative therapies</li> </ul> Drugs used in treatment of disorders of integumentary system	<ul style="list-style-type: none"> <li>Lecture, discussion</li> <li>Demonstration</li> <li>Practical session</li> <li>Case Discussion</li> </ul>	<ul style="list-style-type: none"> <li>Drug report</li> <li>Preparation of Home care plan</li> </ul>
X	16(T) 4(L)	Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of musculoskeletal disorders  Prepare patient for radiological and non-radiological investigations of musculoskeletal system  Demonstrate skill in crutch walking and splinting	<b>Nursing management of patients with musculoskeletal problems</b> <ul style="list-style-type: none"> <li>Review of Anatomy and physiology of the musculoskeletal system</li> <li>Nursing Assessment: History and physical assessment, diagnostic tests</li> <li>Musculoskeletal trauma: Dislocation, fracture, sprain, strain, contusion, amputation</li> <li>Musculoskeletal infections and tumors: Osteomyelitis, benign and malignant tumour</li> <li>Orthopedic modalities: Cast, splint, traction, crutch walking</li> <li>Musculoskeletal inflammation: Bursitis, synovitis, arthritis</li> <li>Special therapies, alternative therapies</li> <li>Metabolic bone</li> </ul>	<ul style="list-style-type: none"> <li>Lecture/</li> <li>Discussion</li> <li>Demonstration</li> <li>Case Discussion</li> <li>Health education</li> </ul>	<ul style="list-style-type: none"> <li>Nursing care plan</li> <li>Prepare health teaching and care of patient with cast</li> </ul>





		Demonstrate skill in care of patient with replacement surgeries	<p>disorder: Osteoporosis, osteomalacia and Paget's disease</p> <ul style="list-style-type: none"> <li>• Spinal column defects and deformities – tumor, prolapsed intervertebral disc, Post's spine</li> <li>• Rehabilitation, prosthesis</li> </ul> <p>Replacement surgeries</p>		
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Unit	Time (Hrs)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
<b>XI</b>	20(T) 3(L)	<p>Explain the etiology, pathophysiology, clinical manifestations, diagnostic tests, and medical, surgical, nutritional, and nursing management of patients with communicable diseases</p> <p>Demonstrate skill in barrier and reverse barrier techniques</p> <p>Demonstrate skill in execution of different isolation protocols</p>	<p><b>Nursing management of patients with Communicable diseases</b></p> <ul style="list-style-type: none"> <li>• Overview of infectious diseases, the infectious process</li> <li>• Nursing Assessment: History and Physical assessment, Diagnostic tests</li> <li>• Tuberculosis</li> <li>• Diarrhoeal diseases, hepatitis A-E, Typhoid</li> <li>• Herpes, chickenpox, Smallpox, Measles, Mumps, Influenza</li> <li>• Meningitis</li> <li>• Gas gangrene</li> <li>• Leprosy</li> <li>• Dengue, Plague, Malaria, Chikungunya, swine flu, Filariasis</li> <li>• Diphtheria, Pertussis, Tetanus, Poliomyelitis</li> <li>• COVID-19</li> <li>• Special infection control measures: Notification, Isolation, Quarantine, Immunization</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture, discussion, demonstration</li> <li>• Practices session</li> <li>• Case Discussion/ seminar</li> <li>• Health education</li> <li>• Drug Book/presentation</li> </ul> <p><b>Refer TB Control &amp; Management module</b></p>	Prepares and submits protocol on various isolation techniques





Mapping of Course Outcomes (COs) with Program Outcomes (POs) and Program Specific Outcomes (PSOs):

COs	POs/ PSOs
COs 1	Pos-1,Pos-2/Psos-1-Psos-13
COs 2	Pos-1,Pos-2/Psos-1-Psos-13
Cos 3	Pos-1,Pos-2/Psos-1-Psos-13
COs 4	Pos-1,Pos-2/Psos-1-Psos-13
COs 5	Pos-1,Pos-2/Psos-1-Psos-13
COs 6	Pos-1,Pos-2/Psos-1-Psos-13
COs 7	Pos-1,Pos-2/Psos-1-Psos-13
Cos 8	Pos-1,Pos-2/Psos-1-Psos-13
Cos 9	Pos-1,Pos-2/Psos-1-Psos-13
Cos 10	Pos-1,Pos-2/Psos-1-Psos-13
Cos 11	Pos-1,Pos-2/Psos-1-Psos-13
Cos 12	Pos-1,Pos-2/Psos-1-Psos-13

#### Reference Books:

1. Brunner and Suddarth's, Text Book of Medical Surgical Nursing, 9<sup>th</sup> edition, 2005, Lippincott Raven Publishers.
2. ohnLuckmann, Medical Surgical Nursing, 3<sup>rd</sup> edition, 1987, Saunders Company, Philadelphia, London
3. Jayce M. Black, Jane Hokanson Hawks, Medical Surgical Nursing- Clinical Mangement for positive outcomes, 7<sup>th</sup> edition, 2005, Elsevier, India.

