

TAKSHASHILA UNIVERSITY

(Tamil Nadu State Private University)

ONGUR, TINDIVANAM TK, VILLUPURAM DT

FACULTY OF HEALTH SCIENCES

SCHOOL OF NURSING



CURRICULUM & SYLLABI

II Semester



TAKSHASHILA UNIVERSITY

(Established under Tamil Nadu State Private Universities Act 2019 & Recognized by UGC use 20(1) of the UGC Act, 1956)

Ongur (PO), Tindivanam Taluk, Villupuram District,
Tamil Nadu - 604 305, India.
04147-234567 | +91 9940186843 | +91 9297623456
contactus@takshashilauniv.ac.in | www.takshashilauniv.ac.in

Faculty of Health Science
B.Sc. NURSING
(TU REGULATION – 2024)
SEMESTER - II

THEORY

Sl. No.	Course Code	Course Title	Cate gory	Periods			Cred its	Hrs.	Max. Marks									
				T	L	C			SE I	SE II	Assign	ATT	IP	GP	CAM		ESM	Total
									(30)	(30)	(10)	(2)	(12)	(6)				
									60/4 = 15			30/3= 10			IA (25)		COLLE GE EXAM (50/2)	(75)
1	U24NST201	BIOC 135 Applied Biochemistry	PC	40	-	-	2	40	15	15	10	2	12	6	25	75	100	
		NUTR 140 Applied Nutrition and Dietetics	PC	60	-	-	3	60			10	2	12	6				
2	U24NST202	N-NF (II) 125 Nursing Foundation II including Health Assessment module	PC	120	-	-	6	120	15	15	10	2	12	6	25 I Sem - 25 & II Sem - 25 (with avg of both)	75	100	
3	U24NST204	HNIT 145 Health/Nursing Informatics & Technology	PC	40	40	-	2+1	80	15	15	10	2	12	6	25	25	-	50
4		SSCC(II) 130 Self-study/Co-curricular	PC	40 20	-	--	-	60	--	--	--	--	--	--	--	--	--	--

PRACTICAL

Sl. No.	Course Code	Course Title	Category	Periods			Credits	Hrs.	Max. Marks									
				T	L	C			SE I		ATT (2)	Assign(10)	CECP (10)	End of OSCE (5)	COP & CR (3)	CAM(50)	ESM (50)	Total (100)
									OSCE (10)	DOP (20)								
									30/2=15 15X2=30									
5	U24NSP203	N- NF (II) 125 Nursing Foundation-II Including Health Assessment Module	PC	-	120	320	3+4	440	10	20	2	10	10	5	3	50	50	100
Total:								21	740+60									
Semester Total:								21	800									

[Signature]
BoS Chairman

[Signature]

[Signature]

[Signature]

[Signature]

Note:

L – Lab

T – Theory

C – clinical

SE – Sessional exam

GP – group presentation

CECP – continuous evaluation of clinical performance

COP& CR – completion of procedures and clinical requirements

OSCE- Objective Structured Clinical examination

DOP – Directly observed Practical

ASS – Assignment

ATT - Attendance

CAM - Continuous Assessment Marks

IP – individual presentation

ESM – End Semester Exam Marks

J. Karthikeyan

CS

Singh

PS

D. Kur

U24NST201	Course Name BIOC 135 Applied Biochemistry	T	L	C	Cr	Total
		40	-	-	2	40

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 functioning of human body, its alterations in disease conditions and to apply this knowledge in the practice of nursing.

COURSE OUTCOMES:

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

CO1 :	Describe the metabolism of carbohydrates, lipids, proteins and amino acids and its alterations.
CO2 :	Explain clinical enzymology in various disease conditions.
CO3 :	Explain acid base balance, imbalance and its clinical significance.
CO4 :	Describe the metabolism of hemoglobin and its clinical significance
CO5 :	Explain different function tests and interpret the findings and Illustrate the immunochemistry.

COURSE OUTLINE

T – Theory

Unit	Time (Hrs)	Learning outcomes	Content	Teaching/Learning Activities	Assessment Methods
I	8 (T)	Describe the metabolism of carbohydrates and its alternations	Carbohydrates - Digestion, absorption and metabolism of carbohydrates and related disorders - Regulation of blood glucose - Diabetes Mellitus – type 1 and type 2 symptoms, complications & management in brief - Investigations of Diabetes Mellitus - OGTT – Indications, Procedure, Interpretation and types of GTT, IV GTT - HbA1c (Only definition) - Hypoglycaemia – Definition & cause	- Lecture cum Discussion - Explain using charts and slides - Demonstration of laboratory tests	- Essay - Short answer - Very short answer
II	8 (T)	Explain the metabolism of lipids and its alterations	Lipids - Fatty acids-Definition, classification - Definition & Clinical significance of MUFA &	- Lecture cum Discussion - Explain using charts and slides	- Essay - Short answer - Very short answer

g. can the

GP

Shirley

tes

D. Bur

			PUFA Essential fatty acids, Trans fatty acids • Digestion, absorption & metabolism of lipids & related disorders • Compounds formed from cholesterol • Ketone bodies (name, types & significance only) • Lipoproteins-types & functions (metabolism not required) • Lipid profile • Atherosclerosis (in brief)	• Demonstration of laboratory tests	
III	9 (T)	Explain the metabolism of amino acids and proteins Identify alterations in disease conditions	Proteins • Classification of amino acids based on nutrition, metabolic rate with examples • Digestion, absorption & metabolism of protein & related disorders • Biologically, important compounds synthesized from various amino acids (only names) • Inborn errors of amino acid metabolism only aromatic amino acids (in brief) • Plasma Protein – types, function & normal values • Causes of proteinuria, hypoproteinaemia, hyper-gamma globulinemia • Principle of electrophoresis, normal & abnormal electrophoretic patterns (in brief)	• Lecture cum Discussion • Explain using charts and slides	• Essay • Short answer • Very short answer
IV	4 (T)	Explain clinical enzymology in various disease conditions	Clinical Enzymology • Isoenzymes – Definition & properties • Enzymes of diagnostic importance in ○ Liver Diseases – ALT, AST, ALP, GGT ○ Myocardial infarction – CK, cardiac troponins, AST, LDH	• Lecture cum Discussion • Explain using charts and slides	• Essay • Short answer • Very short answer

J. K. Sharma

G. Singh

S. Singh

P. Singh

D. Singh

			○ Muscle diseases-CK, Aldolase ○ Bone diseases – ALP ○ Prostate cancer – PSA, ACP		
V	3 (T)	Explain acid base balance, imbalance and its clinical significance	Acid base maintenance • pH-definition, normal value • Regulation of blood pH – blood buffer, respiratory & renal • ABG – normal values • Acid base disorders – types, definition & causes	• Lecture cum Discussion • Explain using charts and slides	• Essay • Short answer • Very short answer
VI	2 (T)	Describe the metabolism of haemoglobin and its clinical significance	Heme catabolism • Heme degradation pathway • Jaundice – type, cause, urine & blood investigations (van den berg test)	• Lecture cum Discussion • Explain using charts and slides	• Short answer • Very short answer
VII	3 (T)	Explain different function tests and interpret the findings	Organ function tests (biochemical parameters & normal values only) • Renal • Liver • Thyroid	• Lecture cum Discussion • Visit to Lab • Explain using charts and slide	• Short answer • Very short answer
VIII	3 (T)	Illustrate the immunochemistry	Immunochemistry • Structure & functions of immunoglobulin • Investigations & interpretation - ELISA	• Lecture cum Discussion • Explain using charts and slide • Demonstration of laboratory tests	• Short answer • Very short answer

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

J. Karthe

[Signature]

[Signature]

[Signature]

[Signature]

TEXT BOOKS :

1.	Harbanslal rajesh pandi , A textbook of Biochemistry , 3 rd edition , CBS publisher
2.	Pankaja naik , Biochemistry , 5 th edition , Jaypee brothers
3.	S.S Randhawa, A textbook of Biochemistry, pv publications, 2017 edition , s.vikas & company (Medical publishers) India
4.	U.Sathyanarayana, Biochemistry textbook , 2007 edition , Arunabha Sen books and allied (P) Ltd

REFERENCE BOOKS :

1.	Harbanslal rajesh pandi , A textbook of Biochemistry , 3 rd edition , CBS publisher
2.	Pankaja naik , Biochemistry , 5 th edition , Jaypee brothers
3.	S.S Randhawa , A textbook of Biochemistry, pv publications, 2017 edition , s.vikas & company (Medical publishers) India
4.	U.Sathyanarayana , Biochemistry textbook , 2007 edition , Arunabha Sen books and allied (P) Ltd

WEB REFERENCES :

1.	https://www.ncbi.nlm.nih.gov/books?utm
2.	https://pubmed.ncbi.nlm.nih.gov?utm

g. Karthi

CS

Amrutha

Red

D. Mur

U24NST201	Course Name NUTR 140 APPLIED NUTRITION AND DIETETICS	T	L	C	Cr	Total
		45	15	-	3	60

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

COURSE OUTCOMES:

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

CO1 :	Identify the importance of nutrition in health and wellness
CO2 :	Apply nutrient and dietary modifications in caring patients
CO3 :	Explain the principles and practices of Nutrition and Dietetics
CO4:	Identify nutritional needs of different age groups and plan a balanced diet for them
CO5 :	Identify the dietary principles for different diseases
CO6:	Plan therapeutic diet for patients suffering from various disease conditions
CO7:	Prepare meals using different methods and cookery rules

COURSE OUTLINE

T-Theory

Unit	Time (Hrs)	Learning Outcomes	Content	Teaching / Learning Activities	Assessment Methods
I	2 (T)	Define nutrition and its relationship to Health	Introduction to Nutrition Concepts - Definition of Nutrition & Health - Malnutrition-Under Nutrition & Over Nutrition - Role of Nutrition in maintaining health - Factors affecting food and nutrition Nutrients - Classification - Macro & Micronutrients - Organic & Inorganic - Energy Yielding & Non-Energy Yielding Food - Classification-Food groups - Origin	- Lecture cum Discussion - Charts/Slides	- Essay - Short answer - Very short answer
II	3 (T)	Describe the classification functions, sources and recommended daily	Carbohydrates - Composition – Starches, sugar and cellulose - Recommended Daily Allowance (RDA)	- Lecture cum discussion - Charts/Slides - Models - Display of food items	- Essay - Short answer - Very short Answer

Handwritten signature

Handwritten signature

Handwritten signature

Handwritten signature

Handwritten signature

		allowances (RDA) of carbohydrates	○ Dietary sources ○ Functions Energy • Unit of energy – Kcal • Basal Metabolic Rate (BMR) • Factors affecting BMR		
III	3 (T)	Describe the classification Functions, sources and RDA of proteins	Proteins • Composition • Eight essential amino acids • Functions • Dietary sources • Protein requirements - RDA	○ Models ○ Display of food items	○ Essay ○ Short answer ○ Very short Answer
IV	2 (T)	Describe the classification Functions, sources RDA of fats	Fats • Classification – Saturated & unsaturated • Calorie value • Functions • Dietary sources of fats and fatty acids • Fat requirements - RDA	○ Lecture cum discussion ○ Charts/Slides ○ Models ○ Display of food items	○ Essay ○ Short answer ○ Very short ○ Answer
V	3 (T)	Describe the classification Functions, sources RDA of vitamins	Vitamins • Classification – fat soluble & water soluble • Fat soluble – Vitamins A, D, E, and K • Water soluble – Thiamine (vitamin B1) Riboflavin (vitamin B2) Nicotinic acid, Pyridoxine (vitamin B6), Pantothenic acid, Folic acid, Vitamin B12, Ascorbic acid (vitamin C) • Functions, Dietary Sources & Requirements – RDA of every vitamin	○ Lecture cum discussion ○ Charts/Slides ○ Models ○ Display of food items	○ Essay ○ Short answer ○ Very short ○ Answer
VI	3 (T)	Describe the classification functions, sources and RDA of minerals	Minerals • Classification – major, minerals (Calcium, phosphorus, sodium, potassium and magnesium) and Trace elements • Functions • Dietary Sources • Requirements - RDA	○ Lecture cum discussion ○ Charts/Slides ○ Models ○ Display of food items	○ Short answer ○ Very short Answer
VII	7 (T) 8 (L)	Describe and plan balanced diet for different age groups,	Balanced diet • Definition, principles, steps • Food guides – Basic Four Food Groups	○ Lecture cum discussion ○ Meal planning ○ Lab session on ○ Preparation of balanced diet for different categories	○ Short answer ○ Very short Answer

Handwritten signature

Handwritten signature

Handwritten signature

Handwritten signature

Handwritten signature

		pregnancy, and lactation	• RDA – Definition, limitations, uses • Food Exchange System • Calculation of nutritive value of foods • Dietary fibre Nutrition across life cycle • Meal planning/Menu planning – Definition, principles steps • Infant and Young Child Feeding (IYCF) guidelines – breast feeding, infant foods • Diet plan for different age groups-children, adolescents and elderly • Diet in pregnancy-diagnosis, diet for anaemic pregnant women, iron & folic acid supplementation and counselling • Nutrition in lactation-nutritional requirement diet for lactating mothers complementary feeding/weaning	○ Low-cost nutritious dishes	
VIII	6 (T)	Classify and describe the common nutritional deficiency disorders and identify nurses role in assessment management and prevention	Nutritional deficiency disorders • Protein energy malnutrition magnitude of the problem causes, classification signs & symptoms, Severe acute malnutrition (SAM) management & prevention and nurses role • Childhood obesity – signs & symptoms assessment, management & prevention and nurses role • Vitamin deficiency disorders – vitamin A,B,C&D deficiency disorders – causes, signs & symptoms management & prevention and nurses role • Mineral deficiency diseases – iron, iodine and calcium deficiencies – causes, signs and symptoms, management & prevention and nurses' role	○ Lecture cum discussion ○ Charts/Slides ○ Models	○ Essay ○ Short answer ○ Very short ○ Answer

Handwritten signature in green ink

Handwritten signature in blue ink

Handwritten signature in blue ink

Handwritten signature in blue ink

Handwritten signature in blue ink

IX	4 (T) 7 (L)	Principles of diets in various diseases	Therapeutic diets • Definition, Objectives, Principles • Modifications – Consistency, Nutrients, • Feeding techniques • Diet in Disease – Obesity, Diabetes Mellitus, CVD, Underweight, Renal diseases, Hepatic disorders - Constipation, Diarrhoea pre- and post-operative period	○Lecture cum discussion ○Meal planning ○Lab session on preparation of Therapeutae diets	○Essay ○Short answer ○Very short ○Answer
X	3 (T)	Describe the rules and preservation nutrients	Cookery rules and preservation of nutrients • Cooking-Methods, Advantages and Disadvantages, • Preservation of nutrients • Measures to prevent loss of nutrient during preparation • Safe food handling and Storage of foods • Food preservation • Food additives and food adulteration • Prevention of Food Adulteration Act (PFA) • Food standards	○Lecture cum discussion ○Charts/Slides	○Essay ○Short answer ○Very short answer
XI	4 (T)	Explain the methods of nutritional assessment and nutrition education	Nutrition assessment and nutrition education • Objectives of nutritional assessment • Methods of assessment – clinical examination, anthropometry, laboratory & biochemical assessment, assessment of dietary intake including Food frequency questionnaire (FFQ) method • Nutrition education – purposes, principles and methods	○Lecture cum discussion ○Demonstration ○Writing nutritional assessment report	○Essay ○Short answer ○Evaluation of Nutritional assessment report
XII	3 (T)	Describe nutritional problems in India and nutritional programs	National Nutritional Programs and role of nurse • Nutritional problems in India • National nutritional policy • National nutritional programs Vitamin A Supplementation, Anaemia Mukh Bharat Program,	○Lecture cum Discussion	○Essay ○Short answer ○Very short answer

g. karthi

CS

Amey

PS

D. Kur

			Integrated Child Development Services (ICDS) Midday Meal Scheme (MDMS) National Iodine Deficiency Disorders Control Program (NIDDCP) Weekly Iron Folic Acid Supplementation (WIFS) and others as introduced • Role of nurse in every program		
XIII	2 (T)	Describe the importance of food hygiene and food safety Explain the Acts related to food safety	Food safety • Definition, Food safety considerations & measures • Food safety regulatory measures in India Relevant Acts • Five keys to safer food • Food storage, food handling and cooking • General principles of food storage of food items (ex.milk, meal) • Role of food handlers in food home diseases • Essential steps in safe cooking practices	◦ Guided reading on related acts	◦ Quiz ◦ Short answer

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

A. Karthi

CS

Amritha

PS

Pran

TEXT BOOKS :

- | | |
|----|---|
| 1. | Dharshan sohi , A comprehensive textbook of Nutrition and therapeutic diets, 2 nd edition, Jaypee brothers |
| 2. | Dr. M .Swaminathan , Handbook of food and nutrition , 2018 edition , Bangalore printing and publishing |
| 3. | Molly sam , A textbook of nutrition for nurses ,2006 edition , Jaypee publication |

REFERENCE BOOKS :

- | | |
|----|---|
| 1. | Dharshan sohi , A comprehensive textbook of Nutrition and therapeutic diets, 2 nd edition, Jaypee brothers |
| 2. | Dr. M .Swaminathan , Handbook of food and nutrition , 2018 edition , Bangalore printing and publishing |
| 3. | Molly sam , A textbook of nutrition for nurses ,2006 edition , Jaypee publication |

WEB REFERENCES :

- | | |
|----|---|
| 1. | https://www.who.int/health-topics/nutrition?utm |
| 2. | https://www.fao.org/nutrition/en/?utm_source |

4. Karthikeyan

CS

Dr. S. S. S. S.

Dr. S. S. S. S.

Dr. S. S. S. S.

U24NST202	Course Name N-NF(II) -125 Nursing Foundation - II (including Health Assessment Module)	T	L	C	Cr	Total
		120	-	-	6	120

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

COURSE OUTCOMES:

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

CO1 :	Develop understanding about fundamentals of health assessment and perform health assessment in supervised clinical settings
CO2 :	Demonstrate fundamental skills of assessment, planning, implementation and evaluation of nursing care using Nursing process approach in supervised clinical settings
CO3 :	Assess the Nutritional needs of patients and provide relevant care under supervision
CO4 :	Identify and meet the hygienic needs of patients
CO5 :	Identify and meet the elimination needs of patient
CO6 :	Interpret findings of specimen testing applying the knowledge of normal values
CO7 :	Promote oxygenation based on identified oxygenation needs of patients under supervision
CO8 :	Review the concept of fluid, electrolyte balance integrating the knowledge of applied physiology
CO9 :	Apply the knowledge of the principles, routes, effects of administration of medications in administering medication
CO10:	Calculate conversions of drugs and dosages within and between systems of measurements
CO11:	Demonstrate knowledge and understanding in caring for patients with altered functioning of sense organs and unconsciousness
CO12:	Explain loss, death and grief
CO13:	Describe sexual development and sexuality
CO14:	Identify stressors and stress adaptation modes
CO15:	Integrate the knowledge of culture and cultural differences in meeting the spiritual needs
CO16:	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.

COURSE OUTLINE T-Theory, SL – Skill Lab

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	Health Assessment* ○ Interview techniques ○ Observation techniques ○ Purposes of health assessment ○ Process of Health assessment ○ Health history ○ Physical examination:	○ Modular Learning ○ Health Assessment Module ○ Lecture cum Discussion ○ Demonstration	○ Essay ○ Short answer ○ Objective type ○ OSCE

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

		supervised clinical practice	• Methods Inspection, Palpation, Percussion, Auscultation, Of faction • Preparation for examination Patient and unit • General assessment • Assessment of each body system ○ Documenting health assessment findings		
II	13 (T) 8 (SL)	Describe assessment planning implementation and evaluation of nursing care using Nursing process approach	The Nursing Process • Critical Thinking Competencies, • Attitudes for Critical Thinking, Levels of • critical thinking in Nursing • ☐ Nursing Process Overview • ○ Assessment • ☐ Collection of Data: Types, • Sources, Methods • ☐ Organizing Data • ☐ Validating Data • ☐ Documenting Data • ○ Nursing Diagnosis • ☐ Identification of client problems, • risks and strengths • ☐ Nursing diagnosis statement – • parts, Types, Formulating, • Guidelines for formulating Nursing • Diagnosis • ☐ NANDA approved diagnoses • ☐ Difference between medical and • nursing diagnosis • Types of planning • Establishing Priorities • Establishing Goals and Expected Outcomes, - • Purposes, types, guidelines, Components of goals and outcome statements • Types of Nursing Interventions, Selecting	○ Lecture ○ Discussion ○ Demonstration - Supervised Clinical Practice	○ Essay ○ Short answer ○ Objective type ○ Evaluation of care plan

d. karthikeyan

CS

Dr. Karthikeyan

PS

Dr. Karthikeyan

			interventions: Protocols and Standing Orders • Introduction to Nursing Intervention Classification and Nursing Outcome Classification • Guidelines for writing care plan ○ Implementation • Process of Implementing the plan of care • Types of care – Direct and Indirect • Evaluation Evaluation Process, Documentation and Reporting		
III	5 (T) 5 (SL)	Identify and meet the Nutritional needs of patients	Nutritional needs ○ Importance ○ Factors affecting nutritional needs ○ Assessment of nutritional status ○ Review: special diets – Solid, Liquid, Soft ○ Review on therapeutic diets ○ Care of patient with Dysphagia, Anorexia, Nausea, Vomiting ○ Meeting Nutritional needs, Principles, equipment, procedure, indications ○ Oral ○ Enteral Nasogastric ○ Orogastric ○ Introduction to others enteral feeds – types, indications, Gastrostomy, Jejunostomy ○ Parenteral – TPN (Total Parenteral Nutrition)	○ Lecture ○ Discussion ○ Demonstration ○ Exercise Supervised Clinical Practice	○ Essay ○ Short answer ○ Objective type Evaluation of nutritional assessment & diet planning
IV	5 (T) 15 (SL)	Identify and meet the hygienic needs of patients	Hygiene ○ Factors Influencing Hygienic Practice ○ Hygienic care: Indications and purposes, effects of neglected care ○ Care of the skin – (Bath, feet and nail Hair Care) ○ Care of pressure points	○ Lecture ○ Discussion ○ Demonstration	○ Essay ○ Short answer ○ Objective type OSCF

d. Karthikeyan

Gg

Amal Kumar

RS

D. Karthikeyan

			○ Assessment of Pressure Ulcers using Braden Scale and Norton Scale ○ Pressure ulcers – causes, stages and manifestations, care and prevention ○ Perineal care/Meatal care ○ Oral care, Care of Eyes, Ears and Nose including assistive devices (eye glasses, contact lens, dentures, hearing aid)		
V	10 (T) 10 (SL)	Identify and meet the elimination needs of patients	Elimination needs Urinary Elimination ○ Review of Physiology of Urine Elimination, Composition and characteristics of urine ○ Factors Influencing Urination ○ Alteration in Urinary Elimination ○ Facilitating urine elimination: assessment, types, equipment procedures and special considerations ○ Providing urinal/bed pan ○ Care of patients with ○ Condom drainage ○ Intermittent Catheterization ○ Indwelling Urinary catheter and urinary drainage ○ Urinary diversions ○ Bladder irrigation ○ Bowel Elimination ○ Review of Physiology of Bowel Elimination Composition and characteristics of feces ○ Factors affecting Bowel elimination ○ Alteration in Bowel Elimination ○ Facilitating bowel elimination Assessment, equipment, procedures ○ Enemas	○ Lecture ○ Discussion ○ Demonstration	○ Essay ○ Short answer ○ Objective type ○ OSCF

h. karthi

[Signature]

[Signature]

[Signature]

[Signature]

			○ Suppository ○ Bowel wash ○ Digital Evacuation of impacted feces Care of patients with Ostomies (Bowel Diversion Procedures)		
VI	3 (T) 4 (SL)	Explain various types of specimens and identify normal values of tests Develop skill in specimen collection, handling and transport	Diagnostic testing ○ Phases of diagnostic testing (pre-test, intra-test & post-test) in Common investigations and clinical implications ○ Complete Blood Count ○ Serum Electrolytes ○ LFT ○ Lipid/Lipoprotein profile ○ Serum Glucose – AC, PC, HbA1c ○ Monitoring Capillary Blood Glucose (Glucometer Random Blood Sugar – GRBS) ○ Stool Routine Examination ○ Urine Testing – Albumin, Acetone, pH, Specific Gravity ○ Urine Culture, Routine, Timed Urine Specimen ○ Sputum culture ○ Overview of Radiologic & Endoscopic Procedures	○ Lecture ○ Discussion ○ Demonstration	○ Essay ○ Short answer ○ Objective type
VII	11 (T) 10 (SL)	Assess patients for oxygenation needs, promote oxygenation and provide care during oxygen therapy	Oxygenation needs ○ Review of Cardiovascular and Respiratory Physiology ○ Factors affecting respiratory functioning ○ Alterations in respiratory Functioning ○ Conditions affecting ○ Airway ○ Movement of air ○ Diffusion ○ Oxygen transport ○ Alterations in oxygenation ○ Nursing interventions to promote oxygenation, assessment, types,	○ Lecture ○ Discussion ○ Demonstration	○ Essay ○ Short answer ○ Objective type ○ Problem solving – calculations

g. karnth

GS

Amity

PS

g. karnth

			equipment used & procedure ○ Maintenance of patent airway ○ Oxygen administration ○ Suctioning – oral, tracheal ○ Chest physiotherapy – Percussion, Vibration & Postural drainage ○ Care of Chest drainage principles & Purposes ○ Pulse Oximetry – Factors affecting measurement of oxygen saturation using pulse oximeter, Interpretation ○ Restorative & continuing care ○ Hydration ○ Humidification ○ Coughing techniques ○ Breathing exercises - Incentive spirometry		
VIII	5 (T) 10 (SL)	Describe the concept of fluid, electrolyte balance	Fluid, Electrolyte, and Acid – Base Balances • Review of Physiological Regulation of Fluid, Electrolyte and Acid-Base Balances • Factors Affecting Fluid, Electrolyte and Acid-Base Balances ○ Disturbances in fluid volume ○ Deficit • Hypovolemia • Dehydration ○ Excess • Fluid overload • Edema • Electrolyte imbalances (hypo and hyper) ○ Acid-base imbalances • Metabolic – acidosis & alkalosis • Respiratory – acidosis & alkalosis ○ Intravenous therapy	○ Lecture ○ Discussion - Demonstration	○ Essay ○ Short answer ○ Objective type ○ Problem solving calculations

S. Karthika

CS

[Signature]

[Signature]

D. Vire

			○ Peripheral venipunctures sites ○ Types of IV fluids ○ Calculation for making IV fluid plan ○ Complications of IV fluid therapy ○ Measuring fluid intake and output ○ Administering Blood and Blood components ○ Restricting fluid intake - Enhancing Fluid intake		
IX	20 (T) 22 (SL)	Explain the principles, routes, effects of administration of medications Calculate conversions of drugs and dosages within and between system of measurements Administer oral and topical medication and document accurately under supervision	Administration of Medications • Introduction – Definition of Medication, Administration of Medication, Drug Nomenclature, Effects of Drugs, Forms of Medications, Purposes, Pharma co dynamics & Pharmacokinetics • Factors influencing Medication Action • Medication orders and Prescriptions • Systems of measurement • Medication dose calculation • Principles, 10 right of Medication Administration • Errors in Medication administration • Routes of administration • Storage and maintenance of drugs and Nurses responsibility • Terminologies and abbreviations used in prescriptions and medications orders • Developmental considerations	○ Lecture ○ Discussion - Demonstration	○ Essay ○ Short answer ○ Objective type - OSCE

A. Karthikeyan

[Signature]

[Signature]

[Signature]

[Signature]

		• Oral, Sublingual and Buccal routes: Equipment, procedure - Introduction to Parenteral Administration of Drugs – Intramuscular, Intravenous, Subcutaneous, Intradermal: Location of site, Advantages and disadvantages of the specific sites, Indication and contraindications for the different routes and sites. • Equipment – Syringes & needles, cannulas, Infusion sets- parts, types, sizes • Types of vials and ampoules, preparing Inject able medicines from vials and ampoules Care of equipment decontamination and disposal of syringes, needles infusion sets ○ Prevention of Needle-Stick Injuries ○ Topical Administration: Types, purposes, site, equipment, procedure ○ Application to skin & mucous membrane ○ Direct application of liquids, Gargle and swabbing the throat ○ Insertion of Drug into body cavity: Suppository /medicated packing in rectum/vagina ○ Instillations: Ear, Eye, Nasal, Bladder, and Rectal ○ Irrigations: Eye, Ear, Bladder, Vaginal and Rectal ○ Spraying: Nose and throat ○ Inhalation: Nasal, oral, endotracheal/tracheal	
--	--	---	--

f. canthine

[Signature]

[Signature]

[Signature]

[Signature]

			(steam, oxygen, and medications) – purposes, types, equipment, procedure, recording and reporting of medications administered • Other Parenteral Routes: Meaning of epidural, intrathecal, intraosseous, intrapersonal, intrapleural intraarterial		
X	5 (T) 6 (SL)	Provide care to patients with altered functioning of sense organs and unconsciousness in supervised clinical practice	Sensory needs • Introduction • Components of sensory experience-Reception, Perception & Reaction • Arousal Mechanism • Factors affecting sensory function • Assessment of Sensory alterations- sensory, deficit deprivation, overload & sensory poverty • Management • Promoting meaningful communication (patients with Aphasia, artificial airway & Visual and Hearing impairment) Care of Unconscious Patients • Unconsciousness: Definition causes & risk factors, pathophysiology, stages of Unconsciousness, Clinical Manifestations • Assessment and nursing management of patient with unconsciousness complication	◦ Lecture ◦ Discussion Demonstration	◦ Essay ◦ Short answer ◦ Objective type
XI	4 (T) 6 (SL)	Explain loss, death and grief	Care of Terminally ill, death and dying • Loss - Types • Grief, Bereavement & Mourning • Types of Grief responses	◦ Lecture ◦ Discussion ◦ Case discussions ◦ Death care/last office	◦ Essay ◦ Short answer ◦ Objective type

Handwritten signature

Handwritten signature

Handwritten signature

Handwritten signature

Handwritten signature

			• Manifestations of Grief • Factors influencing Loss & Grief Responses • Theories of Grief & Loss – Grief Responses • Theories of Grief & Loss – Kubler Ross • 5 Stages of Dying • The R Process model (Rando's) • Death-Definition, Meaning Types (Brain & Circulatory Deaths) • Signs of impending Death • Dying patient's Bill of Rights • Care of Dying Patient • Physiological changes occurring after Death • Death Declaration, Certification • Autopsy • Embalming • Last office/Death Care • Counselling & supporting grieving relatives • Placing body in the Mortuary • Releasing body from Mortuary • Overview-Medico-legal Cases, Advance directives, DNI/DNR, Organ Donation, Euthanasia		
			PSYCHOSOCIAL NEEDS (A-D)		○
XII	3 (T)	Develop basic understanding of self-concept	A Self-concept • Introduction • Components (Personal Identity, Body Image, Role Performance, Self Esteem) • Factors affecting Self Concept • Nursing Management	○ Lecture ○ Discussion ○ Case discussions ○ Case Discussion/Role Play	○ Essay ○ Short answer ○ Objective type
XIII	2 (T)	Describe sexual development and sexuality	B - Sexuality • Sexual development throughout life • Sexual health	○ Lecture ○ Discussion	○ Essay ○ Short answer

g. kaur

GS

Amrta

PS

D. Kaur

			• Sexual orientation • Factors affecting sexuality • Prevention of SHs unwanted pregnancy avoiding sexual harassment and abuse • Dealing with inappropriate sexual behaviour		○ Objective type
XIV	2 (T) 4 (SL)	Describe stress and adaptation	C – Stress and Adaptation – Introductory concepts • Introduction • Sources, Effects Indicators & Types of Stress • Types of stressors • Stress Adaptation – General Adaptation Syndrome (GAS) Local Adaptation Syndrome (LAS) • Manifestation of stress – Physical & psychological • Coping strategies/Mechanisms • Stress Management ○ Assist with coping and adaptation ○ Creating therapeutic environment Recreational and diversion therapies ○ Recreational and diversion therapies	○ Lecture ○ Discussion ○	○ Essay ○ Short answer ○ Objective type
XV	6 (T)	Explain culture and cultural norms Integrate cultural differences and spiritual needs in providing care to patients under supervision	D Concepts of Cultural Diversity and Spirituality • Cultural diversity • Cultural Concepts – Culture • Subculture, Multicultural Diversity, Race, Acculturation, Assimilation • Transcultural Nursing • Cultural Competence • Providing Culturally Religion, Spirituality, Spiritual Wellbeing • Factors affecting Spirituality • Spiritual Problems in Acute, Chronic, Terminal illnesses & Near-Death Experience • Dealing with Spiritual Distress/Problems	○ Lecture ○ Discussion	○ Essay ○ Short answer ○ Objective type

L. Kaur

GS

Amrita

PS

D. Mur

XVI	6 (T)	Explain the significance of nursing theories	• Nursing Theories Introduction • Meaning & Definition Purposes, Types, of theories with examples, Overview of selected nursing theories – Nightingale Orem, Roy • Use of theories in nursing practice	○Lecture ○ Discussion	○Essay ○Short answer ○Objective type
-----	-------	--	---	------------------------------	--

TEXT BOOKS :

1.	Taylor – Fundamentals of Nursing, 2007, LWW
2.	Kozier – Fundamentals of Nursing ,2007,Pearson
3.	Potter – Basic Nursing ,2008,Elsevier
4.	Lynn – Taylor’s Clinical Nursing Skills,2008,LWW
5.	LWW – Lippincott’s Nursing Procedure, 2008, LWW

REFERENCE BOOKS :

1.	Craven – Fundamentals of Nursing ,2010,LWW
2.	Potter – Fundamentals of Nursing ,2009,Elsevier’s
3.	St John’s Ambulance – First AID, 2007,St John’s Ambulance Association.
4.	Jacob – Clinical Nursing Skills & Procedures ,2008,Jaypee
5.	Carpenito – Understanding Nursing Process,2007,LWW

WEB REFERENCES :

1.	https://www.ncbi.nlm.nih.gov/books?utm
2.	https://www.ncbi.nlm.nih.gov/books?utm

A. Karthi

GP

Amal

PS

D. Laxmi

U24NST203	Course Name N-NF(II) -125 NURSING FOUNDATION - II (including Health Assessment Module)	T	L	C	Cr	Total
		-	120	320	3+4	440

COURSE OUTCOMES:

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

CO1 :	Perform health assessment of each body system
CO2 :	Develop skills in assessment, planning, implementation and evaluation of nursing care using Nursing process approach 3.
CO3 :	Implement basic nursing techniques in meeting hygienic needs of patients
CO4 :	Plan and Implement care to meet the elimination needs of patient
CO5 :	Develop skills in instructing and collecting samples for investigation.
CO6 :	Perform simple lab tests and analyze & interpret common diagnostic values
CO7 :	Identify patients with impaired oxygenation and demonstrate skill in caring for patients with impaired oxygenation
CO8 :	Identify and demonstrate skill in caring for patients with fluid, electrolyte and acid – base imbalances
CO9 :	Assess, plan, implement & evaluate the basic care needs of patients with altered functioning of sense organs and unconsciousness
CO10:	Perform Care for terminally ill and dying patients

CLINICAL POSTING – General Medical / Surgical Wards

Clinical unit	Duration (weeks)	Learning Outcomes	Procedure Competencies / Clinical Skills (Supervised Clinical Practice)	Clinical Requirements	Assessment Method
General Medical/ Surgical wards	3	Perform health assessment of each body system	Health Assessment - Nursing / Health history - Taking - Perform physical examination - General - Body system - Use various methods of physical examination- Inspection, Palpation, Percussion, Auscultation, Olfaction. - Documentation of finding	- History taking – 2 - Physical examination - 2	- Assessment of clinical skills using checklist - OSCE

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

1	Develop skills in assessment, planning, implementation and evaluation of nursing care using Nursing process approach	The Nursing Process • Prepare Nursing care plan for the patient based on the given case scenario	• Nursing process - 1	• Evaluation of Nursing process with criteria
2	Identify and meet the Nutritional needs of patients Implement basic nursing technique in meeting hygienic needs of patients	Nutritional needs, Elimination needs & Diagnostic testing • Nutritional needs • Nutritional Assessment • Preparation of Nasogastric tube feed • Nasogastric tube feeding Hygiene - Care of Skin & Hair - Sponge Bath / Bed bath - Care of pressure points & back massage • Pressure sore risk assessment using Braden/ Norton scale - Hair wash - Pediculosis treatment • Oral Hygiene • Perineal Hygiene • Catheter care	• Nutritional Assessment and Clinical Presentation - 1 • Pressure sore assessment - 1	• Assessment of clinical skills using checklist • OSCE
2	Plan and Implement care to the elimination needs of patient	• Elimination needs • Providing • Urinal • Bedpan • Insertion of Suppository • Enema • Urinary Catheter care	• Clinical Presentation on Care of patients with Constipation-1	• Assessment of clinical skills using checklist • OSCE

g. Karthikeyan

[Signature]

[Signature]

[Signature]

[Signature]

			- Care of urinary drainage Diagnostic testing - Specimen Collection - Urine routine - Sputum culture - Perform simple Lab Tests using reagent strips - Urine – Glucose, Albumin, Acetone, Ph Specific gravity - Blood – GRBS Monitoring	Lab values- inter - pretation	
	3	Identify patients with impaired oxygenation and demonstrate skill in caring for patients with impaired oxygenation	Oxygenation needs, Fluid, Electrolyte, and Acid- Base Balance Oxygenation needs Oxygen administration method Nasal Prongs Face Mask / Venturi Mask Steam inhalation Chest Physiotherapy Deep Breathing & Coughing Exercises Oral Suctioning Fluid, Electrolyte, and Acid – Base Balances Maintaining intake output chart Identify & report complications of IV therapy Observe Blood & Blood Component therapy Identify & Report Complication of Blood & Blood Component therapy		- Assessment of clinical skills using checklist - OSCE - Assessment of clinical skills using checklist - OSCE

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

3	Explain the principles, routes, effects of administration of medications Calculate conversions of drugs and dosages within and between system of Measurements Administer drugs by the following routes – Oral, Intradermal, Subcutaneous, Intramuscular, Intravenous, Topical, inhalation	Administration of Medications • Calculate Drugs Dosage • Preparation of lotions & solution. • Administer Medications ○ Oral ○ Topical ○ Inhalations ○ Parenteral ▪ Intradermal ▪ Subcutaneous ▪ Intramuscular ▪ Instillations ○ Eyes, Ear, Nose- instillation of medicated drops, nasal sprays, irrigations	• Assessment of clinical skills using checklist • OSCE
2	Assess, plan, implement & evaluate the basic care needs of patients with altered functioning of sense organs and unconsciousness Care for terminally ill and dying patients	Sensory Needs and Care of Unconscious patient, Care of Terminally ill, death and dying Sensory Needs and Care of Unconscious patients • Assessment of Level of Consciousness using Glasgow Coma Scale Terminally ill, death and dying • Death Care	Nursing rounds on care of patients with altered sensorium • Assessment of clinical skills using checklist • OSCE • Assessment of clinical skills using checklist

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

U24NST204	Course Name HNIT 145 HEALTH/NURSING INFORMATICS AND TECHNOLOGY	T	L	C	Cr	Total
		40	40	-	2+1	80

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

COURSE OUTCOMES:

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

CO1 :	Develop a basic understanding of computer application in patient care and nursing practice.
CO2 :	Apply the knowledge of computer and information technology in patient care and nursing education, practice, administration and research.
CO3 :	Describe the principles of health informatics and its use in developing efficient healthcare.
CO4 :	Demonstrate the use of information system in healthcare for patient care and utilization of nursing data.
CO5 :	Demonstrate the knowledge of using Electronic Health Records (EHR) system in clinical practice.
CO6 :	Apply the knowledge of interoperability standards in clinical setting.
CO7 :	Apply the knowledge of information and communication technology in public health promotion.
CO8 :	Utilize the functionalities of Nursing Information System (NIS) system in nursing.
CO9 :	Demonstrate the skills of using data in management of health care.
CO10:	Apply the knowledge of the principles of digital ethical and legal issues in clinical practice.
CO11:	Utilize evidence-based practices in informatics and technology for providing quality patient care.
CO12:	Update and utilize evidence-based practices in nursing education, administration, and practice.

COURSE OUTLINE

T – Theory, P/L – Lab

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Method
	T	P/L				
I	10	15	Describe the importance of computer and technology in patient care and nursing practice	Introduction to computer application for patient care delivery system and nursing practice Use of computer in teaching learning, research and nursing practice	- Lecture - Discussion - Practice session - Supervised clinical practice on HER use - Participate in data analysis using statistical package with statistician	(T) - Short answer - Objective type - Visit reports - Assessment of assignments
			Demonstrate the use computer and technology in patient care, nursing education, practice,	- Window, MS Office : Word, Excel, Power point - Internet - Literature search - Statistical packages	Visit to hospital with different hospital management systems	(P) Assessment of skills using checklist

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

			administration and research	Hospital management information system		
II	4	5	Describe the principles of health informatics Explain the ways data, knowledge and information can be used for effective health care	Principles of Health Informatics - Health informatics – needs, objectives and limitations - Use of data, information and knowledge for more effective healthcare and better health	- Lecture - Discussion - Practical session - Work in groups with health informatics team in a hospital to extract nursing data and prepare a report	(T) - Essay - Short answer - Objective type questions - Assessment of report
III	3	5	Describe the concepts of information system in health Demonstrate the use of health information system in hospital setting	Information System in Healthcare - Introduction to the role and architecture of information system in modern healthcare environments - Clinical Information System (CIS)/Hospital information System (HIS)	- Lecture - Discussion - Demonstration - Practical session - Work in group with nurse leader to understand the hospital information system	(T) - Essay - Short answer - Objective type
IV	4	4	Explain the use of electronic health records in nursing practice Describe the latest trend in electronic health records standards and interoperability	Shared Care & Electronic Health Records - Challenges of capturing rich patient histories in a computable form - Latest global developments and standard to enable lifelong electronic health records to be integrated from disparate systems.	- Lecture - Discussion - Practice on simulated HER system - Practical session - Visit to health informatics department of a hospital to understand the use of EHR in nursing practice. - Prepare a report on current EHR standards in Indian settings	(T) - Essay - Short answer - Objective type (P) - Assessment of skills using checklist

f. Karthi

GP

Singh

PS

D. Arun

V	3		Describe the advantages and limitations of health informatics in maintaining patients safety and risk management	Patient Safety & Clinical Risk - Relationship between patient safety and informatics - Function and application of the risk management process	- Lecture - Discussion	(T) - Essay - Short answer - Objective type
VI	3	6	Explain the importance of knowledge management Describe the standardized languages used in health informatics	Clinical Knowledge & Decision Making - Role of knowledge management in improving decision – making in both the clinical and policy contexts - Systematized Nomenclature of Medicine, Clinical Terms, SNOMED CT to ICD- 10 – CM Map, standardized nursing terminologies (NANDA, NOC), Omaha system.	Lecture Discussion Demonstration Practical session Work in group to prepare a report on standardized languages used in health informatics. Visit health informatics department to understand the standardized languages used in hospital setting	(T) Essay Short answer Objective type
VII	3		Explain the use of information and communication technology in patient care Explain the application of public health informatics	eHealth: Patients and the Internet - Use of information and communication technology to improve or enable personal and public health care - Introduction to public health informatics and role of nurses	- Lecture - Discussion - Demonstration	- Essay - Short answer - Objective type - Practical exam
VIII	3	5	Describe the functions of nursing information system Explain the use of healthcare data in	Using Information in Healthcare Management - Components of Nursing Information system (NIS) - Evaluation, analysis and presentation of	- Lecture - Discussion - Demonstration on simulated NIS software - Visit to health informatics department of the hospital to understand	(T) - Essay - Short answer - Objective type

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

			management of health care organization	healthcare data to inform decisions in the management of health care organizations	use of health care data in decision making	
IX	4		Describe the ethical and legal issues in health care informatics Explain the ethical and legal issues related to nursing informatics	Information Law & Governance in Clinical Practice - Ethical – legal issues pertaining to health care information in contemporary clinical practice - Ethical – legal issues related to digital health applied to nursing	- Lecture - Discussion - Case discussion - Role play	(T) - Essay - Short answer - Objective type
X	3		Explain the relevance of evidence – based practices in providing quality healthcare	Healthcare Quality & Evidence Based Practice Use of scientific evidence in improving the quality of healthcare and technical and professional informatics standard	- Lecture - Discussion - Case study	(T) - Essay - Short answer - Objective type

SKILLS

- Utilize computer in improving various aspects of nursing practice.
- Use technology in patient care and professional advancement.
- Use data in professional development and efficient patient care.
- Use information system in providing quality patient care.
- Use the information system to extract nursing data.

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

TEXT BOOKS :

1.	Health Informatics: An Interprofessional Approach – Elsevier. Covers electronic health records (EHRs), clinical decision support, telehealth, mHealth, and healthcare information systems.
2.	Informatics for Health Professionals – Jones & Bartlett Learning. An introductory text for nursing and allied health students.
3.	Guide to Health Informatics – CRC Press/Routledge. A comprehensive guide to healthcare information technology and informatics concepts.
4.	Health Informatics: Practical Guide – A practical reference covering healthcare information systems and clinical informatics.
5.	Introductory Textbook in Health Informatics – Springer. Covers foundational concepts, EHRs, telehealth, public health informatics, and data science.

REFERENCE BOOKS :

1.	Health Informatics: An Interprofessional Approach – Elsevier. Covers electronic health records (EHRs), clinical decision support, telehealth, mHealth, and healthcare information systems.
2.	Informatics for Health Professionals – Jones & Bartlett Learning. An introductory text for nursing and allied health students.
3.	Guide to Health Informatics – CRC Press/Routledge. A comprehensive guide to healthcare information technology and informatics concepts.
4.	Health Informatics: Practical Guide – A practical reference covering healthcare information systems and clinical informatics.
5.	Introductory Textbook in Health Informatics – Springer. Covers foundational concepts, EHRs, telehealth, public health informatics, and data science.

WEB REFERENCES :

1.	https://www.ncbi.nlm.nih.gov/books?utm
2.	https://www.ncbi.nlm.nih.gov/books?utm

