

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

(Established under section 3 of the U.G.C. Act, 1956)



BSc., Nursing

Syllabus

2020-2021

BSc., NURSING SYLLABUS

CONTENTS

Sl.No	Description	Page No
1.	Philosophy	1
2.	Aims and objectives	2
3.	Course of Instruction	3
4.	Scheme of examination	8
5.	Question Paper pattern	11
6.	English	14
7.	Anatomy	16
8.	Physiology	18
9.	Nutrition	21
10.	Biochemistry	24
11.	Nursing Foundation	26
12.	Psychology	39
13.	Microbiology	41
14.	Introduction to computers	43
15.	Sociology	44
16.	Pharmacology	48
17.	Pathology	52
18.	Genetics	55
19.	Medical Surgical Nursing (Adult including geriatrics) – I	57
20.	Community Health Nursing – I	70
21.	Communication and Educational Technology	75
22.	Medical Surgical Nursing (Adult including geriatrics) – II	78
23.	Child Health Nursing	87
24.	Mental Health Nursing	91
25.	Nursing Research & Statistics	98
26.	Midwifery & Obstetrical Nursing	100
27.	Community Health Nursing – II	108
28.	Management of Nursing Service and Education	113
29.	Recommended Books	117

PHILOSOPHY

INC believes that:

Health is a state of well-being that enables a person to lead a psychologically, socially and economically productive life. Health is a right of all the people. Individuals, families and communities have a responsibility towards maintain their health.

Nursing contributes to the health services in a vital and significant way in the health care delivery system. It recognizes national health goals and is committed to participate in the implementation of National Health policies and programmes. It aims at identifying health needs of the people, planning and providing quality care in collaboration with other health professionals and community groups.

Scope of nursing practice encompasses provision of promotive, preventive, curative and rehabilitative aspects of care to people across their life span in wide variety of health care settings. Practice of nursing is based upon application of basic concepts and principles derived from the physical, biological and behavioural sciences, medicine and nursing.

Nursing is based on values of caring, and aims to help individuals to attain independence in self-care. It necessitates development of compassion and understanding of human behavior among its practitioners to provide care with respect and dignity and protect the rights of individuals and groups.

Undergraduate nursing program is broad based education within an academic framework specifically directly to the development of critical thinking skills, competencies & standards required for practice of professional nursing and midwifery as envisaged in National Health Policy 2002.

The teachers have the responsibility to be role models and create learning environment that enables students to acquire inquiry driven, self directed learning and foster an attitude of life long learning.

Under graduate nursing education program prepares its graduates to become exemplary citizen by adhering to code of ethics and professional conduct at all times in fulfilling personal, social and professional obligations so as to respond to national aspirations.

AIM:

The aim of the undergraduate nursing program is to:

- Prepare graduates to assume responsibilities as professional, competent nurses and midwives in providing promotive, preventive, curative, and rehabilitative services.
- Prepare nurses who can make independent decisions in nursing situations, protect the rights of 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.

OBJECTIVES:

On completion of the four year B.Sc. Nursing program the graduate will be able to:

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. Utilize 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 programmes.
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.

COURSE OF INSTRUCTION

First Year

Sl.No	Subject	Theory (In hrs) (Class and Lab)	Practical (In hrs) (Clinical)	(In hrs)
1.	*English	60		
2.	Anatomy	60		
3.	Physiology	60		
4.	Nutrition (Inclusion of Environmental Study)	40 + 20		
5.	Biochemistry	30		
6.	Nursing Foundation	265 +200	450	
7.	Psychology	60		
8.	Microbiology	60		
9.	Introduction to computers	45		
10.	Library Work/Self Study			50
11.	Co – curricular Activities			50
12.	Regional Language (Tamil) Audit course	30		
	Total Hours	900 (935)	450	100
Total Hours = 1455 hrs				

Second Year

Sl.No	Subject	Theory (In hrs) (Class and Lab)	Practical (In hrs) (Clinical)	(In hrs)
1.	Sociology (Inclusion of Environmental Study)	60(75)		
2.	Pharmacology	45		
3.	Pathology	30		
4.	Genetics (Inclusion of Environmental Study)	15 (20)		
5.	Medical Surgical Nursing (Adult including geriatrics) – I	210 (215)	720	
6.	Community Health Nursing – I	90 (105)	135	

	(Inclusion of Environmental Study)			
7.	Communication and Educational Technology	90		
8.	Library Work/Self Study			40
8a.	Self learning module in biomedical waste management *			10*
9.	Co – curricular Activities			35
	Total Hours	540 (580)	855	75 (85)*
Total Hours = 1520 hrs				

Third Year

Sl.No	Subject	Theory (In hrs) (Class and Lab)	Practical (In hrs) (Clinical)	(In hrs)
1.	Medical Surgical Nursing (Adult including geriatrics) – II	120	270	
2.	Child Health Nursing	90	270	
3.	Mental Health Nursing	90	270	
4.	Nursing Research & Statistics *	45	45	
5.	Library Work/Self Study			50
6.	Co – curricular Activities			50
	Total Hours	345	855	100
Total Hours = 1300 hrs				

Fourth Year

Sl.No	Subject	Theory (In hrs) (Class and Lab)	Practical (In hrs) (Clinical)	
1.	Midwifery & Obstetrical Nursing	90	180	
2.	Community Health Nursing – II (Inclusion of Environmental Study)	90 (110)	180	
3.	Management of Nursing Service and Education	60 + 30		
	Total Hours	290	360	
Total Hours = 650 hrs				

Internship (Integrated Practice)

Sl.No	Subject	Theory (In hrs) (Class and Lab)	Practical (In hrs) (Clinical)	In Weeks
1.	Midwifery & Obstetrical Nursing		240 (240+180)	9
2.	Community Health Nursing – II		195	4
3.	Medical Surgical Nursing		430	9
4.	Child Health Nursing		145	3
5.	Mental Health Nursing		95	2
	Total Hours		1285	27
Total Hours = 1105* hrs				

Note:

1. Internship means 8 hours of integrated clinical duties in which 2 weeks of evening and night shift duties are included.
2. Internship should be carried out 8 hours per day @ 48 hours per week.
3. Students during internship will be supervised by Nursing teachers.
4. Fourth year final examination to be held only after completing internship.

SCHEME OF EXAMINATION

First Year

Sl. No	Subjects	Assessment			
		Hours	Internal	External	Total
1.	Anatomy & Physiology	3	25	75	100
2.	Nutrition & Biochemistry	3	25	75	100
3.	Nursing Foundations	3	25	75	100
4.	Psychology	3	25	75	100
5.	Microbiology	3	25	75	100
6.	English	3	25	75	100
7.	Introduction to Computer		25	75	100
Practical and Viva Voce					
8.	Nursing Foundations		100	100	200

Second Year

Sl. No	Subjects	Assessment			
		Hours	Internal	External	Total
1	Sociology	3	25	75	100
2	Medical Surgical Nursing (Adult including geriatrics) – I	3	25	75	100
3	Pharmacology, Pathology & Genetics	3	25	75	100
4	Community Health Nursing – I	3	25	75	100
5	Communication & Educational Technology	3	25	75	100
Practical and Viva Voce					
6	Medical Surgical Nursing (Adult including geriatrics) – I		100	100	200

Third Year

Sl. No.	Subjects	Assessment			
		Hours	Internal	External	Total
1	Medical Surgical Nursing (Adult including geriatrics) – II	3	25	75	100
2	Child Health Nursing	3	25	75	100
3	Mental Health Nursing	3	25	75	100
4	Nursing Research & Statistics	3	25	75	100
Practical and Viva Voce					
5	Medical Surgical Nursing (Adult including geriatrics) – II		50	50	100
6	Child Health Nursing		50	50	100
7	Mental Health Nursing		50	50	100

Fourth Year

Sl.No.	Subjects	Assessment			
		Hours	Internal	External	Total
1.	Midwifery & Obstetrical Nursing	3	25	75	100
12.	Community Health Nursing – II	3	25	75	100
13.	Management of Nursing Service and Education	3	25	75	100
Practical and Viva Voce					
4.	Midwifery & Obstetrical Nursing		50	50	100
5.	Community Health Nursing – II		50	50	100

QUESTION PAPER PATTERN

I YEAR BSc., NURSING

Paper I – Anatomy & Physiology (75 marks)

Duration - 3 hrs

Section - A

Anatomy

37 marks

I – brief essay for 10 marks

1 x 15 marks

= 15 marks (choice of 1 out of 2)

II – short notes of 5 marks each

2 x 5 marks

= 10 marks (choice of 2 out of 3)

III- short answers of 2 marks each

6 x 2 marks

= 12 marks

Section – B

Physiology

38 marks

I – brief essay for 10 marks

1 x 15 marks

= 15 marks (choice of 1 out of 2)

II –short notes of 5 marks each

3 x 5 marks

= 15 marks (choice of 3 out of 4)

III – short answers of 2 marks each

4 x 2 marks

= 8 marks

Paper II – Nutrition & Biochemistry (75 marks)

Duration - 3 hrs

Section - Nutrition

45 marks

I – brief essay for 10 marks

1 x 15 marks

= 15 marks (choice of 1 out of 2)

II – short notes of 5 marks each

4 x 5 marks

= 20 marks (choice of 4 out of 5)

III - short answers of 2 marks each

5 x 2 marks

= 10 marks

Section – B

Biochemistry

30 marks

I – brief essay for 10 marks

1 x 15 marks

= 15 marks (choice of 1 out of 2)

II –short notes of 5 marks each

2x 5 marks

= 10 marks (choice of 2 out of 3)

III – short answers of 2 marks each

5 x 2 marks

= 10 marks

Paper III – Nursing Foundations (75 marks)

Duration - 3 hrs

Paper IV - Psychology (75 marks)

Duration – 3 hrs

Paper V - Microbiology (75 marks)

Duration – 3 hrs

Paper VII – Introduction to computer (75 marks)

Duration – 3 hrs

I – Brief essay for 10 marks

2 x 10 marks

= 20 marks (choice of 2 out of 3)

II – Short notes of 5 marks each

5x 5 marks

= 25 marks (choice of 5 out of 6)

III - Short answers of 2 marks each

15 x 2 marks

= 30 marks

Paper VI - English (75 marks)

Duration – 3 hrs

I – Brief essay for 15 marks

1 x 15 marks

= 15 marks (choice of 2 out of 3)

II – One mark question

15x1 mark

= 15 marks

III – Letter writing

1 x 10 marks

= 10 marks

IV – Comprehension

1 x 10 marks

= 10 marks

V – Precis writing	1 x 10 marks	= 10 marks
VI – Vocabulary	10 x 1 mark	= 10 marks
VII – Match the following	5 x 1 mark	= 5 marks

(# Amended on 22.06.2010)

II YEAR BSc., NURSING

Paper I - Sociology (75 marks)

Duration – 3 hrs

Paper II - Medical Surgical Nursing (Adult including geriatrics) – I (75 marks)

Duration – 3 hrs

Paper IV – Community Health Nursing - I (75 marks) Duration – 3 hrs

Paper V – Communication and Educational Technology (75 marks)

Duration – 3 hrs

I – Brief essay for 15 marks 2 x 15 marks = 30 marks (choice of 2 out of 3)

II – Short notes of 5 marks each 5x 5 marks = 25 marks (choice of 5 out of 6)

III - Short answers of 2 marks each 10 x 2 marks = 20 marks

Paper III –Pharmacology, Pathology, Genetics (75 marks) Duration - 3 hrs

Section - A Pharmacology (38 marks)

I – Brief essay for 15 marks 1 x 15 marks = 15 marks (choice of 1 out of 2)

II – Short notes of 5 marks each 3x 5 marks = 15 marks (choice of 3 out of 4)

III –Short answers of 2 marks each 4 x 2 marks = 8 marks

Section – B Pathology (25 marks)

I – Brief essay for 15 marks 1 x 15 marks = 15 marks (choice of 1 out of 2)

II – Short notes of 5 marks each 2 x 5 marks = 10 marks (choice of 2 out of 3)

Section – C Genetics (12 marks)

I – Short notes of 5 marks each 2 x 5 marks = 10 marks (choice of 2 out of 3)

II- Short answers 2 marks 1x2 marks = 2 Marks

III YEAR BSc., NURSING

Paper I – Medical Surgical Nursing – II (75 marks)

Duration - 3 hrs

Paper II – Child Health Nursing – II (75 marks)

Duration - 3 hrs

Paper III – Mental Health Nursing (75 marks)

Duration - 3 hrs

I – Brief essay for 15 marks 2 x 15 marks = 30 marks (choice of 2 out of 3)

II – Short notes of 5 marks each 5x 5 marks = 25 marks (choice of 5 out of 6)

III - Short answers of 2 marks each 10 x 2 marks = 20 marks

Paper IV - Nursing Research & Statistics (75 marks)

Duration - 3 hrs

Section A – Nursing Research (50 marks)

I – Brief essay for 15 marks 1 x 15 marks = 15 marks (choice of 2 out of 3)

II – Short notes of 5 marks each 5 x 5 marks = 25 marks (choice of 5 out of 6)

III - Short answers of 2 marks each 5 x 2 marks = 10 marks

Section B – Statistics (25 marks)

I - Brief essay for 15 marks each 1 x 15 marks = 15 marks (choice of 1 out of 2)

II - Short notes of 5 marks each 2 x 5 marks = 10 marks (choice of 2 out of 3)

IV YEAR B.Sc. NURSING

Paper I – Midwifery & Obstetrical nursing (75 marks)

Duration - 3 hrs

Paper II – Community Health Nursing – II (75 marks)

Duration - 3 hrs

Paper III – Management of Nursing service and Education (75 marks)

Duration - 3 hrs

I – Brief essay for 15 marks 2 x 15 marks = 30 marks (choice of 2 out of 3)

II – Short notes of 5 marks each 5x 5 marks = 25 marks (choice of 5 out of 6)

III - Short answers of 2 marks each 10 x 2 marks = 20 marks

ENGLISH

Placement: 1st year

Time: Theory –60 hours

Description: The course is designed to enable students to enhance ability to comprehend spoken and written English (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 experiences.

The learning objectives of are:

- Speak and write grammatically correct English
- Develop ability to read, understand and express meaningfully, the prescribed text
- Develop writing skills
- Develop skill in spoken English
- Develop skill in listening comprehension

Unit I:

- Review of Grammar
- Remedial study of Grammar
- Building Vocabulary
- Phonetics
- Public Speaking

Unit II:

Read and comprehend prescribed course books.

Unit III: Various forms of composition

- Letter writing
- Note taking
- Précis writing
- Nurses notes
- Anecdotal records
- Diary writing
- Reports on health problems etc.
- Resume / CV

Unit IV: Spoken English

- Oral report
- Discussion

- Debate
- Telephonic conversation

Unit V: Listening comprehension

- Media, audio video, speeches etc.

The teaching learning activities will be in the form of Demonstration use of dictionary, Class-room conversation, Exercise on use of Grammar, Practice in public speaking.

- Exercise on :
Reading, Summarizing, Comprehension
- Exercises on writing:
Letter writing, Nurses notes, Precise, Diary, Anecdote, Health Problems, Story writing, Resume / CV, Essay writing, Discussion on written reports / documents, Visits to CSSD and Clinical Practice.
- Exercise on :
Debating, Participating in Seminar, panel, symposium, Telephonic conversation
- Exercise on :
Listening to audio video tapes and identify the key points

The internal assessment will be done through tests consisting of objective type, Fill in the blanks, Para phrasing, Essay types, Assessments of the skills based on the check list.

ANATOMY

Placement: First year
hours

Time: Theory –60

Description: The course is designed to enable students to acquire knowledge of the normal structure of various human body systems and understand the alterations in anatomical structures in disease and practice of nursing.

The learning objectives of are:

- Describe the anatomical terms, organizations of human body and structure of cell, tissues, membranes and glands
- Describe the structure and function of bones and joints
- Describe the structure and function of muscles
- Describe the structure & function of nervous system
- Explain the structure and functions of sensory organs
- Describe the structure and function of circulatory and lymphatic system
- Describe the structure and functions of respiratory systems
- Describe the structure and functions of digestive system
- Describe the structure and functions of excretory system
- Describe the structure and functions of endocrine system
- Describe the structure and functions of reproductive system

Unit I: Introduction to Anatomical terms organization of the human body :

- Human Cell Structure
- Tissues – Definition, Types, characteristics, classification, location, functions and formation.
- Membranes and glands – classification and structure, Alterations in disease, Applications and implications in nursing.

Unit II: The skeletal System

- Bones – types, structure, Axial & Appendicular Skeleton
- Bone formation and growth
- Description of bones
- Joints – classification and structure
Alterations in disease, Applications and implications in nursing.

Unit III:

- The Muscular System
- Types and structure of muscles
- Muscles groups
- Alterations in disease.
- Applications and implications in nursing.

Unit IV: The Nervous system

- Structure of neuralgia & neurons
- Somatic Nervous system
- Structure of brain, spinal cord, cranial nerves, peripheral nerves
- Autonomous Nerves system – sympathetic, parasympathetic
- Structure, location
- Alteration in disease
- Applications and implications in nursing.

Unit V: The Sensory Organs

- Structure of skin, eye, ear, nose, tongue, (Auditory & Olfactory apparatus)
- Alterations in disease
- Applications and implications in nursing.

Unit VI: Circulatory and lymphatic system

- The Circulatory System
- Blood – Microscope structure
- Structure of heart
- Structure of blood vessels – Arterial & Nervous system
- Circulation: systemic, pulmonary, coronary
- Lymphatic system
- Lymphatic vessels and lymph Lymphatic tissues
- Thymus gland
- Lymph nodes
- Spleen
- Lymphatic nodules
- Alterations in disease
- Applications and implications in nursing

Unit VII: The Respiratory System

- Structure of the organs of respiration
 - Muscles of respiration: intercostals and Diaphragm
- Alterations in disease, Applications and implications in nursing.

Unit VIII: The Digestive System

- Structure of Alimentary tract and accessory organs of digestions
- Alterations in disease, Applications and implications in nursing.

Unit IX: The Excretory System (Urinary)

- Structure of organs of urinary System: kidney ureters, urinary bladder, urethra
- Structure of skin
Alterations in disease, Applications and implications in nursing

Unit X: The Endocrine System

- Structure of Pituitary, Pancreas, Thyroid ,parathyroid thymus and alterations in disease

Alterations in disease, Applications and implications in nursing

Unit XI: The reproductive system including breast

- Structure of the female reproductive organs
- Structure of the male reproductive organs
- Structure of breast

Alterations in disease, Applications and implications in nursing

The teaching learning activities will be in the form of Lecture discussions, Explain using charts, microscopic slides, Skelton and torso, loose bones and joints, models and films, specimens, Demonstrate cell types of tissues, Demonstrate muscular movements, membranes and glands, Record book

The internal assessment will be done through tests consisting of short answers and Objective type

PHYSIOLOGY

Placement: First year

Time: Theory –60 hours

Course Description: The course is designed to assist the students to acquire knowledge of the normal structure of various human body systems and understand the alterations in anatomical structures in physiology disease and practice of nursing.

The learning objectives of are:

- Describe the Physiology of cell, tissues, membranes and glands
- Describe the Bone formation and growth and movements of skeleton systems
- Describe the muscle movements and tone and demonstrate muscle contraction and tone
- Describe the Physiology of nerve stimulus, brain, cranial and spinal nerves
- Demonstrate reflex action and stimulus
- Describe the Physiology of Blood and functions of Heart
- Demonstrate blood cell count, coagulation, grouping, Hb: BP and pulse monitoring
- Describe the Physiology and mechanisms of respirations
- Demonstrates spirometry
- Describe the Physiology of digestive system
- Demonstrates BMR
- Describe the Physiology of excretory system
- Describe the Physiology of sensory organs
- Describe the Physiology of endocrine glands
- Describe the Physiology of male and female reproductive system
- Describe the Physiology of Lymphatic and Immunological system

Unit I: Cell physiology

- Tissue –formation, repair
- Membranes& glands -functions
- Membranes and glands – functions

Alterations in disease.

Applications and implications in nursing.

Unit II: The skeletal System

- Bones formation &growth
- Bones –functions and movements of bones of axial and appendicular skeleton, bones healing
- Joints –joint movement Alterations in disease.

Applications and implications in nursing.

Unit III: The Muscular System

Muscle movements, muscle tone physiology of muscle contraction, level and maintenance of posture

Alterations in disease.

Applications and implications in nursing

Unit IV: The Nervous system

- Functions of Neuralgia & neurons
- Stimulus & nerve-impulse-definitions and mechanism
- Functions of brain.
- Spinal cord.
- Cranial and spinal nerves
- Cerebrospinal fluid-Composition, circulation and function Reflex arch, Reflex action and reflexes
- Autonomous Functions- Pain: somatic, visceral, and referred
- Autonomic learning and biofeedback

Alteration in disease

Applications and implications in nursing.

Unit V: Circulatory System

- Blood formation, composition, blood groups, blood coagulation
- Hemoglobin: Structure. Synthesis and breakdown. Variation of molecules, estimation
- Function of Heart, Conduction Cardiac cycle. Circulation- Principles. Control. Factors
Influencing BP and Pulse

Alterations in disease

Applications and implications in nursing.

Unit VI: The Respiratory System

Functions of respiratory organs

- Physiology of respiration
- Pulmonary ventilation. Volume
- Mechanics of respiration
- Gaseous exchange in lungs
- Carriage of oxygen & carbon-dioxide
- Exchange of gases in tissues Regulation of respiration

Alterations in disease

Applications and implications in nursing.

Unit VII: The Digestive System

Functions of organs of digestive tract. Movements of alimentary tract Digestion in mouth, stomach small intestines, Large intestines, Absorption of food, Functions of liver, gall bladder and pancreas

Metabolism carbohydrates, protein and fat

Unit VIII: The Excretory system

- Functions of kidneys, ureters, urinary bladder & urethra
- Composition of urine
- Mechanism of urine formation
- Functions of skin
- Regulation of body temperature
- Fluid and electrolyte balance.

Alterations in disease

Applications and implications in nursing.

Unit IX: The sensory organs

- Function of skin, eye, ear, nose, tongue

Alterations in disease

Applications and implications in nursing.

Unit X: The Endocrine system

- Function of pituitary, pineal body, thymus, Thyroid, parathyroid pancreas, Suprarenal, Placenta and ovaries & Testes

Alterations in disease

Applications and implications in nursing.

Unit XI: The Reproductive system

- Reproduction of cells-DNA, mitosis, meiosis, spermatogenesis. oogenesis.
- Functions of female reproductive organs: Functions of breast, Female sexual cycle.
- Introduction to embryology.

Function of male reproductive organs, male function in reproduction, male fertility system.

Alterations in disease

Applications and implications in nursing.

Unit XI: The Reproductive system

- Reproduction of cells-DNA, mitosis, meiosis, spermatogenesis. oogenesis.
- Functions of female reproductive organs: Functions of breast, Female sexual cycle.
- Introduction to embryology.
- Function of male reproductive organs, male function in reproduction, male fertility system.
- Alterations in disease
- Applications and implications in nursing.

Unit XII: Lymphatic and Immunological system

- Circulation of Lymph
- Immunity
Formation of T-cells and B cells

Types of immune response

Antigens

Cytokines

Antibodies

The teaching learning activities will be in the form of Lecture discussions, Explain using charts, models, films, slides and specimen, Demonstration of joint movement, Demonstrate muscular movements tone and contraction, Demonstrate nerve stimulus reflex action reflex, Demonstration of spirometry, Demonstration of BMR, Demonstration of Blood cell count, coagulation, grouping Hemoglobin estimation, Heart conduction system. Measurement of pulse, BP

The internal assessment will be done through tests consisting of short answers and Objective type

NUTRITION

Placement: First year

Theory - 45 + 20 hours

Course Description: The course is designed to assist the students to acquire knowledge of nutrition for maintenance of optimum, health at different stages of life and its application for practice of nursing.

The learning objectives of are:

- Describe the relationship between nutrition & Health
- Describe the classification, function, sources and recommended daily allowances (RDA) of carbohydrates
- Describe the Food resources and World food problems, caused by agriculture **
- Describe the classification, functions, sources and recommended daily allowances (RDA) of Fats
- Describe the classification, functions, sources and recommended daily allowances (RDA) of Fats
- Describe the daily calorie requirement for different categories of people
- Describe the classification, functions, sources and recommended daily allowances (RDA) of Vitamins
- Describe the classification, functions, sources and recommended daily allowances (RDA) of Minerals
- Describe the Sources, function and requirements of Water & electrolytes Physiology of excretory system
- Describe the Various national programmes related to nutrition
- Describe the role of nurse in assessment of nutritional status and nutrition education

Unit I: Introduction - Nutrition: History Concepts

- Role of nutrition in maintaining health Nutritional problems in India
- National nutritional policy
- Factors affecting food and nutrition: socio-economic, cultural, tradition, production, system of distribution, life style and food habits etc
- Role of food and its medicinal value
- Classification of foods
- Food standards
- Elements of nutrition: macro and micro
- Calorie. BMR

Unit II:

- Carbohydrates, Classification, Caloric value
- Recommended daily allowances, Dietary sources
- Function: Digestion, absorption and storage, metabolism of carbohydrates
- Malnutrition: Deficiencies and Over consumption

- Food recourses: World food problems, caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies

Unit III: Fats Classification

- Caloric value
- Recommended daily Allowances
- Dietary sources
- Functions. Digestion. absorption and storage, metabolism
- Malnutrition: Deficiencies and Over consumption

Unit IV: Proteins Classification

- Caloric value
- Recommended daily Allowances
- Dietary sources
- Functions. Digestion ,absorption metabolism
- Malnutrition: Deficiencies and Over consumption

Unit V: Energy

- Unit of Energy - Kcal Energy requirements of different categories of people
Measurements of energy. Body Mass Index (BMI) and Basal Metabolic Rate (BMR) determination and factors affecting determination and factors affecting

Unit VI: Vitamins Classification

- Caloric value
- Recommended daily allowances
- Dietary sources
- Functions: Digestion. Absorption and synthesis metabolism storage and excretion
- Deficiencies Hypervitaminosis

Unit VII: Minerals

- Classification
- Recommended daily
- Dietary sources
- Functions.
Absorption and synthesize metabolism storage and excretion
Deficiencies
Over consumption and toxicity

Unit VIII: Water & electrolytes

- Water: Daily requirement, regulation of water metabolism, distribution of body caters.
- Electrolytes types. Sources. Composition of body fluids

- Maintenance of fluid & electrolyte balance
- Over hydration, dehydration and water intoxication
- Electrolyte to imbalances

Unit IX:

Role of nurse in nutritional programme National programme related to nutrition Vitamin A deficiency programme

National and International iodine deficiency disorders (IDD) programme. Mid-day meal programme. Integrated child development scheme (ICDS) National and International agencies working towards food /nutrition

- NIPCCD,CARE,FAO,NIN,CFTRI(Central foods technology and research institute)etc
- Assessments of nutritional status
- Nutrition education and role of nurse

Calculation of balanced diet for different categories of people.

Menu Planning

Budgeting of foods

Therapeutic diet - clear fluid, fluid diet, soft diet, bland diet

Principles, methods of cooking and serving

Safe food handling toxicity

Food adulteration

The teaching learning activities will be in the form of Lecture discussions, Explaining using charts, slide / film shows, Panel discussion, Assignments case studies, Exercise, Demonstration of Assessment of nutritional status

The internal assessment will be done through tests consisting of short answers and Objective type

Biochemistry

Placement: First year

Time: Theory –60 hours

Course Description: The course is designed to assist the students to acquire knowledge of the normal biochemistry composition and functioning of human body and understand the alterations in biochemistry in disease and practice of nursing.

The learning objectives of are:

- Describe the structure Composition and functions of cell
- Differentiate Between Prokaryote and Eukaryote Cell Identify techniques of Microscopy
- Describe the structure and functions of cell membrane
- Explain the metabolism of carbohydrates
- Explain the metabolism of lipids
- Explain the metabolism of Amino acids and proteins
- Describe immune chemistry

Unit I: Introduction

- Definition and Significance in nursing
- Review of structure Composition and function of cell
- Prokaryote and Eukaryote cell organization
- Microscopy
-

Unit II: Structure and functions of Cell Membrane

- Fluid mosaic model tight Junction, Cytoskeleton
- Transport mechanism: osmosis. Filtration, active channel. Sodium pump
- Acid base balance-maintenance& diagnostic tests
- PH buffers

Unit III: Composition and metabolism of Carbohydrates

- Types, structure, composition uses
- Monosaccharides, Disaccharide, Polysaccharides, Oligosaccharides
- Metabolism Pathways of glucose: Glycolysis Gluconeogenesis: Cori's Cycle. Tricarboxylic acid (TCA) cycle
- Glycogenolysis, Pentose phosphate pathways (Hexose mono phosphate),
- Regulation of blood glucose Level Investigations and their Interpretations

Unit IV: Composition and metabolism of lipids

- Types. structure, composition and uses of fatty acids Nomenclature, Roles and Prostaglandins
- Metabolism of fatty acid
- Breakdown

- Synthesis
- Metabolism of triacylglycerols
- cholesterol metabolism
- biosynthesis and its Regulation
- bile salts and bilirubin Vitamin D
- Steroid hormones
- Lipoproteins and their functions:
- VLDs-IDLs, LDLs and HDLs
- Transport of lipids
- Atherosclerosis. Investigations and their interpretations

Unit V - Composition and metabolism of Amino acids and proteins

- Type, structure composition and uses of Amino acids and proteins
- Metabolism of Amino acids and proteins.
- Protein synthesis targeting and glycosylation
- Chromatography
- Electrophoresis
- Sequencing
- Metabolism of Nitrogen
- Fixation and Assimilation
- Urea Cycle
- Hemes and chlorophylls
- Enzymes and co-enzymes Classification
 - Properties
 - Kinetics and inhibition
 - Control
 - Investigations and their interpretations

Unit VI: Immunochemistry

- Immune response
- Structure and classification
- Properties
- Absorption & transportation Normal concentration investigation and their interpretations

The teaching learning activities will be in the form of Lecture discussions using charts, Slides, Demonstrate use of microscope, Demonstration of blood glucose monitoring, Explain using charts, Demonstrate of laboratory tests

The internal assessment will be done through tests consisting of short answers and Objective type

Nursing Foundations

Placement: First Year
Theory-265 hours

Practical-650hours
(200 lab and 450 clinical)

Course Description: This course is designed to help the students to develop an understanding of the philosophy, objectives, theories and process of nursing in various Supervised Clinical settings. It is aimed at helping the students to acquire knowledge, understanding and skills in techniques of nursing and practice them in Supervised Clinical settings

Learning objectives of are:

- Describe the concept of health, illness and health care agencies
- Explain concept and scope of nursing
- Describe values, code of ethics and professional conduct for nurses in India
- Explain admission and discharge procedure
- Performs admission and discharge procedure
- Communicate effectively patient, Families and team members and maintain effective human relations (projecting professional image)
- Appreciate the importance of patient teaching in nursing
- Explain the concept, uses, format and steps of nursing process
- Documents Nursing process as per the format
- Describe the purposes, types and techniques of recording and reporting
- Describe principles and techniques of monitoring and maintaining vital signs
- Monitor and maintain vital signs
- Describe purpose and process of health assessment
- Describe health assessment of each body system
- Describe the basic, Physiological and psychosocial needs of patient
- Describe the principles and techniques for meeting basic, Physiological and psychosocial needs of patient
- Perform nursing assessment, plan, implement and evaluate the care for meeting basic, Physiological and psychosocial needs of patient
- Describe principles and techniques for infection control and biomedical waste management in supervised clinical settings
- Explain the Principles, Routes, effects Of administration of medications
- Calculate conversions of drugs and dosages within and between systems of measurements
- Administer drugs by the following routes –oral, Intradermal, Subcutaneous, intramuscular intra Venous Inhalation
- Describe the pre and post operative care of patients
- Explain the process of wound healing

- Explain the principles and techniques of wound care
- Perform care of wounds
- Explain care of patients having alterations in body functioning
- Explain care of terminally ill patient
- Explain the basic concepts of conceptual and theoretical models of nursing

Unit I: Introduction

- Concept of Health: Illness continuum
- Factors influencing
- Causes and risk developing illness
Body defenses: Immunity and immunization
- Illness and illness Behaviour: Impact of illness on patient and family
- Health Care Services: Health Promotion and Prevention. Primary Care. Diagnosis. Treatment. Rehabilitation and Continuing Care
- Health care teams
- Types of health care agencies:
- Hospitals: Types, Organization and Functions
- Health Promotion and Levels of disease Prevention
- Primary health care delivery: Role of nurse

Unit II: Nursing as a profession

- Definition and Characteristics of a profession
 - Nursing:
 - Definition, Concepts, philosophy, objectives
 - Characteristics, nature and Scope of nursing practice
 - Functions of nurse
 - Qualities of a nurse
 - Categories of nursing Personnel
 - Nursing as a professional
 - History of Nursing in India
 - Values: Definition, Types.
 - Values Clarification and values in professional Nursing: Caring and Advocacy
 - Ethics:
 - Definition and Ethical Principles
 - Code of ethics and professional conduct for nurses

Unit III: Hospital admission and discharge

- Admission to the hospital
 - Unit and its preparation- admission bed
 - Admission procedure
 - Special considerations
 - Medico-legal issues
 - Roles and Responsibilities of the nurse

- Discharge from the hospital
- Types: Planned discharge, LAMA and abscond, Referrals and transfers
- Discharge Planning
- Discharge procedure
- Special considerations
- Medico-legal issues
- Roles and Responsibilities of the nurse
- Care of the unit after discharge

Unit IV: Communication and Nurse patient relationship

- Communication: Levels

Elements, Types, Modes Process, Factors influencing Communication.

- Methods of Effective Communication
 - Attending skills
 - Rapport building skills
 - Empathy skills
- Barriers to effective communication,
- Helping Relationships (NPR): Dimensions of helping relationship phases of a helping relationship
- Communicating effectively is with patient. Families and team members and maintain effective human relations with special reference to communicating with vulnerable group (children, women, physically and mentally challenged and elderly)
- Patient Teaching: Importance, Purposes. Process, role of nurse and Integrating teaching in Nursing Process.

Unit V: The Nursing Process

- Critical Thinking and Nursing Judgment
 - Critical Thinking: Thinking and Learning.
 - Competencies. Attitudes for critical Thinking. Levels of critical thinking in

Nursing

- Nursing Process Overview:
 - Application in Practice
- Nursing process format INC.
 - Current format
- Assessment
 - Collection of Data: types, Sources. Methods
 - Formulating Nursing judgment: Data interpretation
- Nursing diagnosis
 - Identification of client Problems
 - Nursing diagnosis statement
 - Difference between medical and nursing diagnosis
- Planning
 - Establishing Priorities

Establishing Goals and Expected Outcomes.
Selection of interventions: Protocols and standing Orders
Writing the Nursing Care Plan

- Implementation
Implementing the plan of care
- Evaluation
Outcome of care
Review and Modify
- Documentation and Reporting

Unit VI: Documentation and Reporting

Documentation purposes of Recording and reporting

- Communication within the Health Care team,
- Types of records: ward records, medical/nursing records,
- Common Record-keeping forms, Computerized documentation
- Guidelines for Reporting:
Factual Basis: Accuracy, Completeness, Correctness, Organization, confidentiality
- Methods of Recording,
- Reporting: Change-of shift report, Transfer reports.
Incident reports

Unit VII: Vital signs

- Guidelines for taking vital signs:
- Body temperature:
Physiology, Regulation, Factors affecting body temperature,
Assessment of body temperature: sites, equipments and technique, special Considerations
Temperature alterations: Hyperthermia, Heatstroke, Hypothermia
Hot and cold applications
- Pulse:
Physiology and Regulation: Characteristics of the pulse, Factors affecting pulse
Assessment of pulse: sites, location, equipments and technique, special considerations
Alteration in pulse
- Respiration:
Physiology and Regulation: Mechanics of breathing
Characteristics of the respiration,
Factors affecting respiration
Assessment of respirations: technique, special considerations
Alterations in respiration
- Blood pressure:
Physiology and Regulation, Characteristics of the blood pressure, Factors affecting blood pressure
Assessment of blood pressure site: equipments and technique. Special considerations
Alterations in blood pressure
Recording of Vital signs

Minimizing legal Liability through effective record keeping

Unit VIII: VIII: Health assessment

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

Unit IX: Machinery, Equipment and linen

- Types: Disposables and reusables – Linen, rubber goods glass ware, metal. Plastics, furniture, machinery
- Introduction
- Indent
- Maintenance
- Inventory

Unit X: Meeting needs of patient

- Basic needs (Activities of daily living)
- Providing safe and clean environment
 - Physical environment: Temperature, Humidity, Noise, Ventilation, light, odor, pests control
 - Reduction of Physical hazards: fire, accidents
 - Safety devices: Restraints, side rails, airways, trapeze, etc
 - Role of nurse in providing safe and clean environment
 - Hygiene
 - Factors Influencing
 - Hygienic Practice
 - Hygienic care: Care of the skin-Bath and pressure points, feet and nail. Oral cavity, Hair Care, Eyes, Ears, and Nose
 - Assessment, Principles,
- Types, Equipments, Procedure, Special Considerations
- Patient environment: Room Equipment and linen, making patient beds
 - Types of beds and bed making
 - Comfort:
 - Factors Influencing
 - Comfort
 - Comfort devices
 - Physiological needs:

- Sleep and Rest:
 - Physiology of sleep
 - Factors affecting, sleep
 - Promoting Rest and sleep
 - Sleep Disorders
- Nutrition: -
 - Importance
 - Factors affecting nutritional Needs
 - Assessment of nutritional needs: Variables
 - Meeting Nutritional needs: Principles, equipments, procedure and special considerations
 - Oral
 - Enteral: Naso/Orogastric, gastrostomy
 - Parenteral:
- Urinary Elimination
 - Review of Physiology of Urine Elimination, Composition and characteristics of urine
 - Factors Influencing Urination
 - Alteration in Urinary Elimination
 - Types and Collection of urine specimen: Observation, urine testing
 - Facilitating urine elimination: assessment, types, equipments, procedures and special considerations
- Providing urinal/ bed Pan
 - Condom drainage
 - Perineal care
 - Catheterization
 - Care of urinary drainage
 - Care of urinary diversions
 - Bladder irrigation
- Bowel Elimination
 - Review of Physiology of Bowel Elimination.
 - Factors affecting Bowel elimination
 - Alteration in bowel elimination
 - Type and collection of specimen of faeces: Observation
 - Facilitating Bowel elimination: assessment, equipments, procedures and special considerations
- Passing of Flatus tube
 - Enemas
 - Suppository
 - Sitz bath
 - Bowel wash
 - Care of Ostomies
- Mobility and Immobility
 - Principles of body Mechanics
 - Maintenance of normal body Alignment and mobility
 - Factors affecting body Alignment and mobility

- Hazards associated with immobility
- Alteration in body Alignment and mobility
- Nursing interventions for impaired Body Alignment and Mobility : assessment, types, Devices used, method and Special considerations, rehabilitation aspects
 - Range of motion exercise
 - Maintaining body alignment: Positions
 - Moving, Lifting, Transferring;
 - Walking
 - Restraints
- Oxygenation
 - Review of Cardiovascular and respiratory Physiology
 - Factors Affecting Oxygenation
 - Alteration in oxygenation, Nursing interventions in Oxygenation: assessment, types, equipment used, procedure and special considerations
 - Maintenance of patent airway
 - Oxygen administration
 - Suction
 - Inhalations: dry and moist
 - Chest physiotherapy and postural drainage
 - Care of Chest drainage
 - Pulse oximetry
 - CPR- Basic life support
- Fluid, Electrolyte and Acid Base Balances
 - Review of Physiological Regulation of Fluid, Electrolyte, and Acid - Base Balances
 - Factors Affecting Fluid and electrolyte and Acid - Base Balances
 - Alterations in Fluid, Electrolyte and Acid -- Base Balances
 - Nursing interventions in Fluid, Electrolyte and Acid Base Imbalances: assessment, types, equipment. Procedure and special considerations
 - Measuring fluid intake and output
 - Correcting Fluid, Electrolyte Imbalance:
 - Replacement of fluids: Oral and Parenteral- Venipuncture, regulating IV Flow rates, changing IV solutions and tubing, Changing IV dressing,
 - Administering Blood transfusion
 - Restriction of fluids
- Psychosocial Needs
 - Concepts of Cultural Diversity, Stress and Adaptation, Self-concept, Sexuality, Spiritual Health, Coping with loss, death and grieving
 - Assessment of psychosocial needs
 - Nursing intervention for psychosocial needs
 - Assist with coping and adaptation
- Creating therapeutic environment

- Recreational and diversional therapies

Unit XI: Infection control in clinical settings

- Infection control
 - Nature of infection
 - Chain of infection transmission
 - Defenses against infection: natural and acquired
 - Hospital acquired infection (nosocomial infection)
- Concept of asepsis: medical asepsis and surgical asepsis
 - Isolation precautions (Barrier nursing):
 - Hand washing: simple, hand antisepsis and surgical antisepsis (scrub)
 - Isolation: source and protective
 - Personal protecting equipments: types. Uses and technique of Wearing and removing
 - Decontamination of equipment and unit
 - Transportation of infected patients
 - Standard safety precautions (Universal precautions)
 - Transmission based precautions
- Biomedical waste management:
 - Importance
 - Types of hospital waste
 - Hazards associated with hospital waste
 - Decontamination of hospital Waste
 - Segregation and Transportation and disposal

Unit XII: Administration of Medications

General Principles/ Considerations

- Purposes of Medication
- Principles: 5 rights, Special Considerations, Prescriptions, Safety in Administering Medications and Medication Errors
- Drug forms
- Routes of administration
- Storage and maintenance of drugs and Nurses responsibility
- Broad classification of drugs
- Therapeutic effect, SideEffects, Toxic effects, Idiosyncratic Reactions, Allergic Reactions. Drug tolerance. Drug Interactions
- Factors Influencing drug actions
- Systems of Drug Measurement: Metric systems, Apothecary system, Household measurements. Solutions
- Converting Measurements Units: Conversion within one system, conversion between system, Dosage calculation
- Terminologies and abbreviations used in prescriptions of medications
- Oral Drugs: Administrations: Oral, Sublingual and Buccal: Equipment, procedure
- Parenteral
 - General principles: decontamination and disposal of syringes and needles

- Types of parenteral therapies
- Types of syringes, needles, Cannula and infusion sets
- Protection from Needle stick Injuries: Giving Medications, with a safety syringes
- Routes of parenteral therapies

Intradermal: purpose, site-equipment, procedure, special Considerations,

Subcutaneous: purpose, site, equipment, procedure, Special considerations

Intramuscular: purpose, site, equipment, procedure, special considerations

Intra Venous: purpose. site, equipment, procedure, Special considerations

Advanced Techniques: Epidural, intrathecal, intraosseous , intraperitoneal intraplural intra arterial

- Role of nurse
- Topical Administration: Purposes, site, equipments, Procedure, Special considerations for

Application to Skin

Application to mucous membrane

Direct application of liquids-Gargle and Swabbing the throat

Insertion of Drug into Body cavity: suppository/ medicated packing in rectum/ vagina Nasal Bladder, and rectal

- Instillations: Ear, Eye, Nasal, Bladder, and Rectal
- Spraying: nose and throat.
- Inhalation: Nasal, oral, End tracheal/ tracheal (Steam, Oxygen and medications) - purposes, types, equipment, procedure, special considerations
- Recording and reporting of medications administered

Unit XIII: *Meeting needs of Perioperative patients*

- Definition and concept of Perioperative Nursing
- Preoperative Phase
Preparation of patient for surgery
- Intraoperative
Operation theatre Set up and environment
Role of nurse
- Postoperative Phase
Recovery unit
Post operative unit
Postoperative care,
- Wounds: types, Classifications, wound Healing Process, Factors affecting wound, complications of wound healing
- Surgical asepsis
- Care of the wound: types, Equipments, procedure and special considerations
Dressings, Suture Care.
Care of Drainage
Application of Bandages, Binders. Splints & Slings

- Heat and Cold Therapy

Unit XIV: Meeting special needs of the patient

- Care of patients having alteration in
- Temperature (hyper and hypothermia): Types, Assessment, Management
- Sensorium (Unconsciousness): Assessment, Management
- Urinary Elimination (retention and incontinence): assessment, Management
- Functioning of sensory organs :(Visual & hearing impairment)
- Assessment of Self-Care ability
- Communication Methods and special considerations
- Mobility (physically challenged, cast), assessment of Self-Care ability: Communication Methods and Special considerations
- Mental state (mentally challenged): assessment of Self-Care ability
- Communication Methods and Special considerations
- Respiration (distress): Types, Assessment. Management
- Comfort - (Pain) – Nature, types, Factors influencing Pain Coping, - assessment, Management
- Treatments related to gastrointestinal system naso- gastric suction, gastric irrigation, gastric analysis

UNIT-XV: Care of terminally ill patient

- Concepts of Loss, Grief. Grieving Process
- Signs of clinical death
- Care of dying patient: special
 - Considerations
- Advance directives: euthanasia. Will, Dying
- Declaration, organ donation etc
- Medico-legal issues
- Care of dead Body: equipment. Procedure and care of unit
- Autopsy
- Embalming

UNIT-XVI : Professional Nursing concepts and practices

- Conceptual and theoretical models of nursing practice: Introduction to models –holistic modal, health belief model, health promotion model etc
- Introduction to Theories in nursing: Orem's, Neuman's, Roger's and Roy's
Linking theories with nursing process

Nursing Foundations-practical

Placement: First Year

Time: Theor-265 hours

Practical- 650 hours

(200 lab and 450) clinical)

Course Description: This course is designed to help the students to develop an understanding of the philosophy, objectives, theories and process of nursing in various Clinical settings. It is aimed at helping the students to acquire knowledge, understanding and skills in techniques of nursing and practice them in Clinical settings

Areas: Demonstration Lab General Medical and surgery ward

The learning objectives of are:

- Performs admission and discharge procedure
- Prepares nursing care plan as per the nursing process format
- Communicate effectively with patient families and team members
- Maintain effective human relations
- Develops plan for patient teaching
- Prepare patient reports
- Presents report
- Monitor vital signs
- Perform health assessment of each body system
- Provide basic nursing care to patients
- Perform infection control procedures
- Provide care to pre and post operative patients
- Perform procedures for care of wounds
- Administer drugs
- Provide care to dying and dead
- Counsel and support relatives

Skills:

Hospital admission and discharge(III)

- Admission
- Prepare Unit for new patient
- Prepare admission bed
- Performs admission procedure
New patient

- Transfer in
Prepare patient records

- Discharge/Transfer out
Gives discharge counseling
Perform discharge procedure (Planned discharge).
LAMA and abscond, (Referrals and transfers)
Prepare records of Discharge/ transfer
- Dismantle and disinfect unit and equipment after discharge/transfer
- *Perform assessment:*
(History taking, Nursing diagnosis, problem list, Prioritization, Goals & Expected Outcomes, selection of Interventions Write Nursing Care plan Gives care as per the plan)
- Communication
Use verbal non verbal communication techniques
Prepare a plan for patient teaching session
- Write patient report
Change-of shift reports, Transfer reports, Incident reports etc.
Presents patient report
- Vital signs
Measure, Records and interpret alterations in body temperature- pulse respiration and blood pressure
- Health assessment
Health history taking Perform assessment
General
Body systems
Use various methods of physical examination
Inspection, Palpation, Percussion, Auscultations Olfaction
Identification of system wise deviations
- Prepare patient's unit
Prepare beds: Open, closed, occupied operation, amputation, Cardiac, fracture, burns.
Divided & Fowlers bed
- Pain assessment and provision for comfort

Use comfort devices hygienic care:

- Oral hygiene:
- Baths and care of pressure points
- Hair slash. Pediculosis treatment

Feeding

- Oral. Enteral, Naso /Orogastric, Gastrostomy and Parenteral Feeding
- Naso-gastric insertion, suction, and irrigation

Assisting patient in urinary elimination

- Prosides urinal bed pan
- Condom drainage
- Perineal care
- Catheterization
- Care of urinary drainage

Bladder irrigation Assisting bowel Elimination:

- Insertion of Flatus tube
- Enemas
- Insertion of Suppository

Bowels wash Body Alignment and Mobility:

- Range of motion exercises
- Positioning: Recumbent. Lateral (Rt. Lt). Fowlers, Sims, Lithotomy, Prone, Trendelenburg position
 - Assist patient in moving lifting transferring walking
 - Restraints

Oxygen administration Suctioning:

oropharyngeal, nasopharyngeal , Chest physiotherapy and postural drainage , Care of Chest drainage , CPR- Basic life support ,Intravenous therapy ,Blood and blood component therapy Collect/assist for collection of specimens for investigations Urine, sputum, faeces, vomitus, blood and other body fluids

Perform lab tests:

- Urine: sugar, albumin, acetone
- Blood: sugar (with strip/ gluco-meter)

Hot and cold applications: local and general Sitz bath

Communicating and assisting with self-care of visually & hearing impaired patients

Communicating and assisting with self-care of mentally Challenged/ disturbed patients

Recreational and diversional Therapies Caring of patient with alteration in sensorium

Infection control

- Perform following procedures:
- Hand washing techniques
- (Simple. hand antisepsis and surgical antisepsis (scrub)
- Prepare isolation unit in lab/Ward
- Practice technique of searing and removing Personal protective equipment (PPE)
- Practice Standard safety precautions (Universal Precautions)

Decontamination of equipment and unit: -

- Surgical asepsis: Sterilization
- Handling sterilized equipment

- Calculate strengths of lotions
- Prepare lotions
- Care of articles

Pre and post operative care:

- Skin preparations for surgery: Local
- Preparation of Post operative unit
- Pre & post operative teaching and counseling
- Pre and post operative monitoring
- Care of the wound:
- Dressings, Suture Care, care of Drainage, Application of Bandages, and Binders. Splints & Slings
- Bandaging of various body parts

Administration of medications

- Administer Medications in different forms and routes
- Oral, Sublingual and Buccal
- Parenteral of Intradermal, Subcutaneous, Intramuscular etc.
- Assist with Intra Venous medications
- Drug measurements and dose calculations
- Preparation of lotions and solutions
- Administers topical applications
- Insertion of drug into body cavity: Suppository & medicated packing etc.
- Instillation of medicines and spray into Ear, Eye, Nose and throat
- Irrigations: Eye, Ear, Bladder, Vagina and Rectum
- Inhalations: dry and moist

Care of dying patient

- Caring and packing of dead body
- Counseling and supporting grieving relatives
- Terminal care of the unit

Assignments:

- Practice in unit /hospital
- Write nursing process records of patient
- Simulated -1
- Actual-1
- Role –Plays in simulated situations on situations on communication techniques
- HealthTalk-1
- Write nurses notes and present the patient report 2-3 assigned patient
- Lab practices
- Measure Vital signs of assigned patient
 - Practice in lab &hospital
 - Simulated exercise on CPR manikin

- Observation study -2
- Department of Infection control & CSSD
- Visits CSSD Write Observation 1
- Collection of samples for culture
- Do clinical posting in infection control department and write report
- Practice in lab/ward

Assessment methods

- Evaluate with checklist
- Assessment of clinical Performance with rating scale
- Completion of practical record
- Assessment of Nursing Process Records with checklist
- Assessment of actual care given with rating scale
- Assess role play with the checklist on communication techniques

Assess health talk **with the** checklist

- Assessment of communication techniques by rating scale
- Assessment of performance with rating scale
- Assessment of each skill with checklist
- Completion of activity record
- Assessment of each skill with rating scale
- Completion of activity record
- Assess observation study with checklist
- Evaluate all procedures with checklist

Psychology

Placement: First Year
60 hours

Time: Theory -

Course Description: This course is designed to help the students to acquire Knowledge of fundamentals of psychology and develop an insight into behavior of self and others. Further it is aimed at helping them to practice the principles of mental hygiene for promoting mental health in nursing practice

The learning objectives of are:

- Describe the history, scope and methods of psychology
- Explain the biology of Human behavior
- Describe various cognitive processes and their applications
- Describe motivation emotions, stress attitudes and their influence on behavior
- Explain the concepts of personality and its influence on behaviour
- Describe psychology of people during the life cycle
- Describe the characteristics of
- Mentally healthy person
- Explain ego defense mechanisms
- Explain the psychological assessments and role of nurse

Unit I: Introduction:

- History and origin of science of psychology
- Definitions & Scope of Psychology
- Relevance to nursing
- Methods of Psychology

Unit II: Biology of behavior

- Body mind relationship- modulation process in health and illness
- Genetics and behaviour: Heredity and environment
- Brain and behaviour: Nervous System., Neurons and synapse,
- Association Cortex, Rt and Lt Hemispheres
- Psychology of Sensations
- Muscular and glandular controls of behaviour
- Nature of behaviour of an organism / Integrated responses.

Unit III: Cognitive processes

- Attention: Types, determinants, Duration & degree, alterations
- Perception: Meaning, Principles, factors affecting, Errors,

- Learning: Nature, Types, learner and learning, Factors
- Influencing, laws and theories, process, transfer, study habits
- Memory: Meaning, Types, Nature factors influencing, Development Theories and methods of memorizing and Forgetting
- Thinking: Types and levels, stages of development, Relationship with language and communication
- Intelligence: Meaning, Classification, uses, theories
- Aptitude: Concept, types, Individual differences and variability
- Psychometric assessments of cognitive processes
- Alterations in cognitive processes
- Applications

Unit IV: Motivation and Emotional Processes:

- Motivation: Meaning, Concepts, Types, Theories, Motives and behaviour, Conflicts and frustration, conflict resolution
- Emotions & stress
 - Emotion: Definition, components, Changes in emotions, theories; emotional adjustments, Emotions in health and illness
 - Stress: stressors. cycle, effect, adaptation & coping
- Attitude: Meaning, nature, development, factors affecting,
 - Behaviour and attitudes Attitudinal change
 - Psychometric assessments of emotions and attitudes
 - Alterations in emotions
 - Applications

Unit V: Personality

- Definitions, topography, types, theories
- Psychometric assessments of personality
- Alterations in emotions
- Applications

Unit VI: Developmental Psychology

- Psychology of people at different ages from infancy to old age
- Psychology of vulnerable individuals- challenged, women, sick, etc
- Psychology of groups

Unit VII: Mental hygiene and mental Health

- Concepts of mental hygiene and mental health
- Characteristics of mentally healthy person
- Warning signs of poor mental health
- Promotive and Preventive mental health-strategies and services
- Ego Defense mechanisms and implications
- Personal and social adjustments

- Guidance and counseling
- Role of nurse

Unit VIII: Psychological assessment & tests

- Types, development, Characteristics. Principles, Uses, Interpretations and Role of nurse in psychological assessment

The teaching learning activities will be in the form of Lecture discussions, Psychometric assessment, Practice sessions, Role plays, Case Discussion, Demonstration, The internal assessment will be done through tests consisting of short answers and Objective type and Assessment of practice

Microbiology

Placement: First Year

Time: Theory-60 Hours (Theory 45+15 lab)

Course Description: This course is designed to enable students to acquire understanding of the fundamentals of Microbiology and identifications of various Micro-Organisms. It is also provides opportunities for practicing infection control measures in hospital and community settings.

The learning objectives of are:

- Explain Concepts and principles of microbiology and their importance in nursing
- Describe structure, classification morphology and growth of bacteria
- Identify Micro-organisms
- Describe the methods of infection control
- Identify the role of nurse in hospital infection
- Control programme
- Describe the different producing organisms
- Explain the concept of immunity hyper sensitivity and immunization

Unit I: Introduction

- Importance and relevance to nursing
- Historical perspective
- Concepts and terminology
- Principles of microbiology

Unit II: General characteristics of Microbes

- structure and classification of Microbes
- Morphological types
- size and form of bacteria
- Motility
- Colonization
- Growth and nutrition of microbes
 - a. Temperature
 - b. Moisture
 - c. Blood and body fluids
- Laboratory methods for Identification of Micro-organisms
- Staining techniques, Gram twining, Acid fast staining. Hanging drop preparation
- Culture: Various medias

Unit III: Infection control

- Infection: Sources, portals of entry and exit, transmission
- Asepsis
- Disinfection: Types and methods

- Sterilization: Types and Methods
- chemotherapy and antibiotics
- Standard safety measures
- Biomedical waste management
- Role of Nurse
- Hospital acquired infection
- Hospital infection control programme
- Protocols, collection of samples, preparation of report and status of rate of infection in the unit/hospital nurse's accountability, Continuing education etc.

Unit IV:

- Pathogenic organisms
 - Micro-organisms
 - Cocci - gram Positive and gram negative
 - Bacilli- gram positive and gram negative
 - Spirochaete
 - Mycoplasma Rickettsiae
 - Chlamydia
- Viruses
 - Fungi -Superficial and Deep Mycoses
 - Parasites
 - Rodents & vectors

Characteristics, Source, portal of entry, transmission of infection Identification of disease producing micro-organisms Collection, handling and Transportation of various specimens

Unit V: Immunity

- Immunity-Types, classification
- Antigen and antibody reaction • Hypersensitivity - skin test
- Serological tests

Immunoprophylaxis

- Vaccines & sera-Type & Classification, storage and handling, cold chain
- Immunization for various diseases
Immunization Schedule

The teaching learning activities will be in the form of Lecture discussions, Demonstration, Visits to CSSD and Clinical Practice.

The internal assessment will be done through tests consisting of short answers and Objective type

INTRODUCTION TO COMPUTER

Placement: First year

Time: Theory –45 hours

COURSE DESCRIPTION: This course is designed for students to develop basic understanding of uses of computers and its applications in nursing.

The learning objectives of are:

- Identify and define various concepts used in computer
- Identify application of computer in nursing
- Describe and Use the Disk Operating System
- Demonstrate skill in the use of MS office
- Demonstrate skill in using multi- media
- Identify features of computer aided teaching and testing
- Describe and use the statistical packages
- Describe the use of Hospital Management System

Unit I : Introduction

- Concepts of Computers
- Hardware and software; trends and technology
- Application of computer in nursing

Unit II: Introduction to disk operating system:

- DOS
- Windows Introduction
- MS-word
- MS-Excel with pictorial presentation
- MS-Access
- MS-Power point

Unit III:

Multi media: Types & uses

Computer aided teaching & testing.

Unit IV: Use of Internet and email

Unit V: Statistical packages: types and their features

Unit VI: Hospital Management System: Types and uses

The teaching learning activities will be in the form of Lecture discussions, Demonstration and Practice session. The internal assessment will be done through tests consisting of short answers, Objective type and Practical exam and viva voce.

SOCIOLOGY

PLACEMENT: II YEAR

DURATION: 60 (75) HOURS

COURSE DESCRIPTION: This course is designed to introduce the concepts of sociology related to community and social institution in India and its relationship with health, illness and nursing.

The learning objectives of are:

- The importance of Sociology in Nursing
- The inter relationship of individual in society and community
- The influence of culture and on health and on disease
- To identify various social groups and their interactions
- The growth of population in India and its impact on health
- The institutions of family and marriage in India
- The class and caste system and their influence on health and health practices
- The types of communities in India, their practices and the impact on health.
- The process of Social Change
- The Social system and inter-relationship of social organizations
- The nature and process of social control
- The role of the nurse in dealing with social problems in India.

Unit I : Introduction

- Definition of Sociology
- Nature and scope of the discipline
- Importance and application of Sociology in Nursing.

Unit II: Individual & Society

- Society and Community
- Nature of Society
- Difference between Society & Community
- Process of Socialization and individualization
- Personal disorganization

Unit III: Culture

- Nature of culture
- Evolution of culture
- Diversity and uniformity of culture
- Culture and socialization
- Transactional society

- Influence on health and disease

Unit IV: Social groups and Processes

- The meaning and classification of groups
- Primary & Secondary Group
- In-group V/s. Out-group, Class tribe, Caste
- Economic, Political, Religious groups, Mob, Crowd, Public and Audience Interaction & Social Processes
- Co-operation, Competition, Conflict
- Accommodation, Assimilation & Isolation

Unit V: Population

- Society and population
- Population distribution in India – demographic characteristics
- Malthusian theory of Populations
- Population explosion in India and its impact on health status
- Family welfare programmes

Unit VI: Family and Marriage

- Family – Functions
- Types – Joint, Nuclear, Blended and extended family:
- Characteristics:
- The Modern Family – Changes, Problems – Dowry etc., Welfare Services
- Changes & legislations on family and marriage in India – marriage acts
- Marriage: Forms and functions of marriage
- Marriage and family problems in India
- Family, marriage and their influence on health and health practices.

Unit VII: Social Stratification

- Meaning and types of social stratification
- The Indian Caste system – origin and features
- Features of Caste in India Today
- Social Class system and status
- Social Mobility – Meaning & Types
- Race as a biological concept, criteria of racial classification
- Salient features of Primary races – Racism
- Influence of class, Caste and Race on health and health practices

Unit VIII: Types of Communities in India (Rural, Urban and Regional)

- Features of village community & Characteristics of Indian Villages – Panchayat system, social dynamics
- Community Development project and planning
- Changes in Indian Rural life
- Availability of health facilities in rural and its impact on health and health practices
- Urban – Community – features
- The growth of cities: Urbanization and its impact on health and health practices
- Major Urban problems – Urban Slums
- Region: Problems and impact on Health

Unit IX: Social Change

- Nature and process of Social change
- Factors influencing Social change : cultural change, Cultural lag
- Introduction to Theories of social change: Linear, Cyclical, Marxian, Functional
- Role of nurse – change agents

Unit X: Social organization and social system

- Social organization : elements, types
- Democratic and authoritarian modes of participation
- Voluntary associations
- Social system: Definition and types of social system
- Inter-relationship of institutions

Unit XI: Social Control

- Nature and process of social control
- Political, Legal, Religious, Educational, Economic, Industrial & Technological systems, Norms and values
- Folkways and more customs, laws and fashion
- Role of nurse

Unit XII: Social Problems

- Social disorganization
- Control & Planning: poverty, housing, illiteracy, food supplies, prostitutions, rights of women and children, vulnerable groups: Elderly handicapped, minority groups and other marginalized groups, child labour, child abuse, delinquency and crime, substance abuse, HIV / AIDS.
- Social Welfare programmes in India.
- Role of nurse

Unit: XIII - Natural Resources*:

- Renewable and non-renewable resources:
- Natural resources and associated problems
 - Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction, mining, dams and their effects on forest and tribal people.
 - Water resources: Use and over utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems. -
 - Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
 - Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification.
- Role of an individual in conservation of natural resources.
- Equitable use of resources for sustainable lifestyles.

Unit: XIV Social Issues and the Environment *

- From unsustainable to Sustainable development
- Urban problems related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people, its problems and concerns. Case studies
- Environmental ethics: issues and possible solutions
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies
- Wasteland reclamation
- Consumerism and waste products
- Environment Protection Act
- Air (Prevention and Control of Pollution) Act
- Water (Prevention and Control of Pollution) Act
- Wildlife Protection Act
- Forest Conservation Act
- Issues involved in enforcement of environmental legislation
- Public awareness

The teaching learning activities will be in the form of Lecture discussions, community identifications, Family case study, Community survey, visits to rural and urban community, community survey, observation visits, Institutional visits.

The internal assessment will be done through tests consisting of essay type, short answers, and assessment of visit reports.

PHARMACOLOGY, PATHOLOGY, GENETICS

Section A – Pharmacology

PLACEMENT : II YEAR

DURATION- Theory: 45 Hours

COURSE DESCRIPTION: This course is designed to enable students to acquire understanding of pharmaco-dynamics, pharmacokinetics, principles of therapeutics and nursing implications.

The learning objectives of are:

- The meaning of Pharmodynamics, pharmokinetics, classification and the principles of drug administration
- Chemotherapy of specific infections and infestations and nurse's responsibilities
- To know Antiseptics, disinfectants, insecticides and nurse's responsibilities
- Drugs acting on Gastro Intestinal System and nurses's responsibilities
- Drugs used on Respiratory Systems and nurse's responsibilities
- Drugs used on Urinary system and nurse's responsibilities
- Drugs used in Dead diction, emergency, deficiency of vitamins & minerals, poisoning, for immunization and immuno-supression and nurse's responsibilities
- Drugs used in skin and mucous membranes and nurse's responsibilities
- Drugs used on Cardio vascular System and nurse's responsibilities
- Drugs used for hormonal disorders and supplementation, contraception and medical termination of pregnancy and nurse's responsibilities
- To Demonstrate awareness of the common drugs used in alternative system of medicine

Unit I : Introduction to Pharmacology

- Definitions
- Sources
- Terminology used
- Types: Classification
- Pharmacodynamics: Actions, therapeutic
- Adverse, toxic
- Pharmacokinetics: absorption, distribution, metabolism, interaction, excretion
- Review: Routes and principles of administrations of drugs
- Indian pharmacopoeia: Legal issues
- Rational use of drugs
- Principles of therapeutics

Unit II: Chemotherapy

- Pharmacology of commonly used;
 - Pencillin
 - Cephalosporins

- Aminoglycosides
- Macrolide and Broad spectrum Antibiotics
- Sulfonamides
- Quinolones
- Antiamoebic
- Antimalarials
- Anthelmintics
- Antiscabies agents
- Antiviral & anti fungal agents
- Antitubercular drugs
- Anti leprosy drugs
- Anti cancer drugs
- Immuno – suppressants
- Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse Normal and Cancer cell

Unit III: Pharmacology of commonly used antiseptics, disinfectants and insecticides

- Antiseptics
- Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse
- Disinfectants
- Insecticides

Unit IV: Drugs acting on G.I system

- Pharmacology of commonly used -
 - Antiemetics
 - Emetics
 - Purgatives
 - Antacids
 - Cholinergic
 - Anticholinergics
 - Fluid and electrolyte therapy
 - Anti diarrhoeals
 - Histamines
 - Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse.

Unit V: Drugs used on Respiratory systems

- Pharmacology of commonly used -
 - Antiasthmatics
 - Mucolytics
 - Decongestants

- Expectorants
- Antitussives
- Broncho constrictors
- Antihistamines
- Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse.

Unit VI: Drugs used on Urinary system

- Pharmacology of commonly used -
 - Diuretics and antidiuretics
 - Urinary antiseptics
 - Cholinergic and anticholinergics
 - Acidifiers and alkalinizers
 - Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse.

Unit VII: Miscellaneous

- Drugs used in de-addiction
- Drugs used in CPR and emergency
- Vitamins and minerals
- Immunosuppressants
- Antidotes
- Antivenom
- Vaccines and sera

Unit VIII: Drugs used on skin and mucous membranes

- Topical applications for skin, eye, ear nose and buccal cavity Antipruritics
- Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse.

Unit IX: Drugs acting on nervous system

- Basic and applied pharmacology of commonly used:
- Analgesics
 - Non steroidal anti-inflammatory (NSAID) drugs
- Antipyretics
- Hypnotics and Sedatives
 - Opioids
 - Non - Opioids
 - Tranquilizers
 - General and local anesthetics
 - Gases: oxygen, nitrous oxide, carbon-di-oxide
- Cholinergic and anti-cholinergics
 - Muscle relaxants

- Major tranquilizers
- Anti-psychotics
- Antidepressants
- Anticonvulsants
- Adrenergics
- Noradrenergics
- Mood stabilizers
- Acetylcholine
- Stimulants

Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse.

Unit X: Cardiovascular drugs

- Haematinics
- Cardiotonics
- Anti anginals
- Anti – hypertensives & Vasodilators
- Anti – arrhythmics
- Plasma expanders
- Coagulants & anticoagulants
- Antiplatelets & thrombolytics
- Hypolipidemics

Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse.

Unit XI: Drugs used for hormonal disorders and supplementation, contraception and medical termination of pregnancy

- Insulin & Oral hypoglycemic
- Thyroid supplements and suppressants
- Steroids, Anabolics
- Uterine stimulants and relaxants
- Oral contraceptives
- Other estrogen – progesterone preparations
- Corticotrophine and Gonadotropines
- Adrenaline
- Prostaglandins
- Clacitonins
- Calcium salts
- Calcium regulators

Composition, action, dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity and role of nurse.

Unit XII: Introduction to Drugs used in alternative systems of medicine:

- Ayurveda, Homeopathy, Unani and Siddha etc

The teaching learning activities will be in the form of Lecture discussions, drug study / presentation, observational visits.

The internal assessment will be done through tests consisting of essay type, short answers.

Section B – Pathology

PLACEMENT: II YEAR
Hours

DURATION- Theory: 30

COURSE DESCRIPTION: This course is designed to enable students to acquire knowledge of pathology of various disease conditions and apply this knowledge in practice of nursing.

The learning objectives of are:

- To know the common terms used in pathology
- Appreciate the deviations from normal to abnormal structure and functions of the body system.
- To explain the Pathological changes in disease conditions of various systems.
- The various laboratory tests in assessment and monitoring of disease conditions
- The laboratory tests for examinations of body cavity fluids, transudates and exudates
- The laboratory tests for examination of Urine and faeces.

Unit I :

• **Introduction**

- Importance of the study of pathology
 - Definition of terms
 - Methods and techniques
 - Cellular and Tissue changes
 - Infiltration and regeneration
 - Inflammations and Infections
 - Wound healing
 - Vascular changes
-
- Cellular growth, Neoplasms
 - Normal and Cancer cell
 - Benign and Malignant growths

- In situ carcinoma
- Disturbances
- Disturbances of fluid and electrolyte imbalance

Unit II : **Special Pathology**

- ❖ Pathological changes in disease conditions of various systems:
- ❖ Respiratory tract
 - Tuberculosis, Bronchitis, Pleural effusion and pneumonia
 - Lung abscess, emphysema, bronchiectasis
 - Bronchial asthma, Chronic obstructive Pulmonary diseases & tumors
- Cardio – vascular system
 - Pericardial effusion
 - Rheumatic heart disease
 - Infective endocarditis, atherosclerosis
 - Ischemia, infarction & aneurysm
- Gastro Intestinal Tract
 - Peptic ulcer, typhoid
 - Carcinoma of GI tract – buccal, Esophageal,
 - Gastric and intestinal
- Liver, Gall bladder & pancreas
 - Hepatitis, Chronic liver, abscess, cirrhosis
 - Tumors of liver, gall bladder and pancreas
 - Cholecystitis
- Kidneys & Urinary tract
 - Glomerulonephritis, pyelonephritis
 - Calculi, renal failure, renal carcinoma & cystitis
- Male genital systems
 - Cryptorchidism, testicular atrophy
 - Prostatic hyperplasia, carcinoma Penis and prostate
- Female genital system
 - Fibroids
 - Carcinoma cervix and Endometrium
 - Vesicular mole, choriocarcinoma
 - Ectopic gestation
 - Ovarian cyst & tumors
 - Cancer Breast

- Central nervous system
 - Hydrocephalus, Meningitis, encephalitis
 - Vascular disorders – thrombosis, embolism
 - Stoke, paraplegia, quadriplegia
 - Tumors, meningiomas – gliomas
- Metastatic tumour
- Skeletal system
 - Bone healing, osteoporosis, osteomyelitis
- Arthritis & tumors

Unit III : **Clinical Pathology**

- Various blood and bone marrow tests in assessment and monitoring of disease conditions
 - Haemoglobin
 - RBC, White cell & platelet counts
 - Bleeding time, clotting time and prothrombine time
 - Blood grouping and cross matching
 - Blood chemistry
 - Blood culture
 - Serological and immunological tests
 - Other blood tests
 - Examination of bone marrow
 - Methods of collection of blood specimen for various clinical pathology, biochemistry, microbiology tests, inference and normal values

Unit IV: **Examination of body cavity fluids, transudates and exudates**

The laboratories tests used in CSF analysis

- Examination of other body, cavity fluids, transudates and exudates – sputum, wound discharge etc
- Analysis of gastric and duodenal contents
- Analysis of semen-sperm count, motility and morphology and their importance in infertility
- Methods of collection of CSF and other cavity fluids specimen for various clinical pathology, biochemistry, microbiology tests, inference and normal values

Unit V: **Urine and faeces**

- Urine
 - Physical characteristics
 - Analysis
 - Culture and sensitivity
- Faeces
 - Characteristics

- Stool examination: occult blood, ova parasite and cyst, reducing substance etc.
- Methods of collection for various tests, inference and normal values

The teaching learning activities will be in the form of Lecture discussions, explaining using charts, slides, specimen, X-rays, scans and visit to clinical Pathology& Biochemistry lab and blood bank.

The internal assessment will be done through tests consisting of essay type, short answer questions.

Section C – Genetics

PLACEMENT: II YEAR

DURATION- Theory: 15 (20) Hours

COURSE DESCRIPTION: This course is designed to enable students to acquire understanding of Genetics, its role in causation and management of defects and diseases.

The learning objectives of are:

- To know the principles and perspective of heredity
- Maternal, prenatal and genetic influences on development of defects and diseases
- The screening methods for genetic defects and diseases in neonates and children
- To identify genetic disorders in adolescents and adults
- The role of nurse in genetic services and counseling

Unit I : Introduction

- Practical application of genetics in Nursing
- Impact of genetic condition on families
- Review of cellular division mitosis and meiosis
- Characteristics and structure of genes
- Chromosomes – sex determination
- Chromosomal aberrations patterns of inheritance
 - Mendelian theory of inheritance
 - Multiple allots and blood groups
 - Sex linked inheritance
 - Mechanism of inheritance
 - Errors in transmission(Mutation)

Unit II: Maternal, prenatal and genetic influences on development of defects and diseases

- Conditions affecting the mother: genetic and infections
- Consanguinity atopy

- Prenatal nutrition and food allergies
- Maternal Age
- Maternal drug therapy
- Prenatal testing and diagnosis
- Effect of Radiation, drugs and chemicals
- Infertility
- Spontaneous abortion
- Neural Tube Defects and the role of folic acid in lowering the risks
- Down syndrome (Trisomy 21)

Unit III: Genetic testing in the neonates and children

- Screening for
 - Congenital abnormalities
 - Development delay
 - Dysmorphism

Unit IV: Genetic conditions of adolescents and adults

- Cancer genetics – Familial Cancer
- Inborn errors alleles and haematological disorder
- Genetic haemochromatosis
- Huntington's diseases
- Mental illness

Unit V: Services related to Genetics

- Genetic testing
- Human genome project
- Gene therapy
- The Eugenic movement
- Genetic Counselling
- Legal and Ethical issues

Role of nurse

Unit VI: Natural Resources *:

- Energy resources; growing energy needs, renewable and non renewable energy
- Sources, use of alternate energy sources, Case-studies.

The teaching learning activities will be in the form of Lecture discussions, explaining using charts and slides.

The internal assessment will be done through tests consisting of essay type, short answer questions.

MEDICAL SURGICAL NURSING

(ADULT INCLUDING GERIATRICS) – I

Placement: Second year

**Duration: Theory – 210 (215) hours
Practical – 720 hours**

Course Description: The purpose of this course is to acquire knowledge and develop proficiency in caring for patients with medical and surgical disorders in varieties of health care settings and at home.

The learning objectives are:

- Appreciate the trends in medical and surgical nursing
- To describe the role of a nurse in caring for adult patient in hospital and community
- The concepts of Medical Surgical asepsis
- The common signs, symptoms, problems and their specific nursing interventions
- The etiology, patho-physiology, clinical manifestations, diagnostic measures and management of patients (adults including elderly) with disorders of respiratory systems, digestive systems, with blood and cardio vascular problems.
- The vascular conditions and its nursing management
- The etiology, patho-physiology, clinical manifestations, diagnostic measures and management of patients (adults including elderly) with disorders of genito urinary system, male reproductive system, endocrine system, disorders of skin, disorders of musculo – skeletal system, Immunological system, patients with communicable diseases.
- The organization and physical set up of operation theatre
- To identify the various instruments and equipments used for common surgical procedures
- The infection control measures in the operation theatre
- The role of the nurse in Peri Operative Nursing care

Unit I : Introduction

- Introduction to medical surgical nursing – Evolution and trends of medical and surgical nursing
- Review of concepts of health and illness, Disease concepts, causations, classification – International classification Diseases (ICD-10 or later version), Acute illness Chronic illness & Terminal illness stages of illness.
- Review of concepts of comprehensive nursing care in medical surgical conditions based on nursing process.
 - ❖ Role of nurse, patient and family in care of adult patient
 - ❖ Role and responsibilities of a nurse in medical surgical settings
- Out patient department
- In-patient unit
- Intensive care unit
- Home and community settings
- Introduction to Medical Surgical asepsis
- Inflammation and Infection Wound healing
- Care of Surgical Patient

- Pre – operative
- Intra operative
- Post Operative

Unit II: Common signs and symptoms and management

- Fluid and electrolyte imbalance
- Vomiting
- Dyspnea and cough, respiratory obstruction
- Fever
- Shock
- Unconsciousness, Syncope
- Pain
- Incontinence
- Edema
- Age related problems – geriatric

Unit III: Nursing management of patients (adults including elderly) with respiratory problems

- Review of anatomy and physiology of respiratory systems
- Nursing Assessment – History and Physical Assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics and nursing management of adults including elderly with -
 - Upper Respiratory tract infections
 - Bronchitis
 - Asthma
 - Emphysema
 - Empyema
 - Atelectasis
 - Chronic Obstructive Pulmonary Diseases (COPD)
 - Bronchiectasis
 - Pneumonia
 - Pulmonary tuberculosis
 - Lung abscess
 - Pleural effusion
 - Cysts and Tumors
 - Chest injuries
 - Respiratory arrest and insufficiency
 - Pulmonary embolism

Special therapies, alternative therapies

Nursing procedures

Drugs used in treatment of respiratory disorders

Unit IV: Nursing management of patients (adults including elderly) with disorders of digestive problems

- Review of anatomy and physiology of digestive system
- Nursing Assessment – History and Physical Assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics and nursing management
- Disorders of
 - Oral cavity – lips, gums, tongue, salivary glands and teeth
 - Oesophagus – inflammation, stricture, obstruction, bleeding and tumours
 - Stomach and duodenum – hiatus hernia, gastritis, peptic and duodenal ulcer, bleeding tumours, pyloric stenosis
 - Small intestinal disorders – inflammation and infection, enteritis, malabsorption, obstruction, tumour and perforation
 - Large intestinal disorders – Colitis, inflammation and infection and infection, obstruction and tumour and lump
 - Hernias
 - Appendix – inflammation, mass, abscess, rupture
 - Anal & Rectum: hemorrhoids, fissures, Fistulas
 - Peritonitis / acute abdomen
 - Pancreas: inflammation, obstruction, stones and tumours
 - Liver: inflammation, cyst, abscess, cirrhosis, portal hypertension, hepatic failure tumours

Special therapies, alternative therapies

Nursing procedures

Drugs used in treatment of disorders of digestive system

Unit V: Nursing management of patients (adults including elderly) with blood and cardiovascular problems

- Review of anatomy and physiology of blood and cardiovascular problems
- Nursing Assessment – History and Physical Assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics and nursing management of
- Vascular systems
 - Hypertension, Hypotension
 - Arteriosclerosis
 - Raynaud's disease
 - Aneurysm and Peripheral vascular disorders

Heart

- Coronary artery diseases
 - Ischemic heart disease
 - Coronary atherosclerosis
 - Angina pectoris myocardial infarction
- Valvular disorders of the heart
 - Congenital and acquired
 - Rheumatic Heart diseases

- Endocarditis, Pericarditis, Myocarditis
- Cardio Myopathies
- Cardio dysrhythmias, Heart block
- Congestive cardiac failure
 - Cor-pulmonale, pulmonary edema, cardiogenic shock, cardiac tamponade
- Cardiac emergencies and arrest
- Cardio Pulmonary Resuscitation (CPR)
- Blood
 - Anaemias
 - Polycythemia
 - Bleeding disorders, clotting factor defects and platelets defects
 - Thalassemia
 - Leukaemias
 - Leukopenias and agranulocytosis
 - Lymphomas
 - Myelomas
- ❖ Special therapies
 - Blood transfusion, safety checks, procedure and requirements, management of adverse transfusion, reaction, records for blood transfusion.
 - Management and counseling of blood donors, phlebotomy procedure and post donation management. Blood bank functioning and hospital transfusion committee. Bio – safety and waste management in relation to blood transfusion
 - Role of a nurse in Organ donation, retrieval and banking

Alternative therapies

Nursing procedures

Drugs used in treatment of blood and cardio vascular disorders.

Unit VI: Nursing management of patients (adults including elderly) with genito urinary problems

- Review of anatomy and physiology of genito urinary system
- Nursing Assessment – History and Physical Assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics and nursing management of
- Nephritis
- Nephritic syndrome
- Nephrosis
- Renal calculus
- Tumors
- Acute renal failure
- Chronic renal failure
- End stage renal disease
- Dialysis, renal transplant

- Congenital; disorders, urinary infections
- Benign prostate hypertrophy
- Disorders of ureter, urinary bladder and urethra – inflammation, infection, stricture, obstruction, tumor, prostate

Special therapies

Nursing procedures

Drugs used in treatment of genitor urinary disorders.

Unit VII: Nursing management of disorders of male (adults including elderly) reproductive system

- Review of anatomy and physiology of male reproductive system
- Nursing Assessment – History and Physical Assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics and nursing management of disorders of male reproductive system
- Congenital; malformations; cryptorchidism
- Hypospadias
- Infections
- Testis and adjacent structures
- Penis
- Prostate : inflammation, infection, hypertrophy, tumour
- Sexual Dysfunction
- Infertility
- Contraception
- Breast; gynecomastia, tumour
- Climacteric changes, special therapies, alternative therapies

Nursing procedures

Drugs used in treatment of disorders of male reproductive system

Unit VIII: Nursing management of patients (adults including elderly) with disorders of endocrine system

- Review of anatomy and physiology of endocrine system
- Nursing Assessment – History and Physical Assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics and nursing management –
 - Disorders of thyroid and Parathyroid
 - Diabetes mellitus
 - Diabetes insipidus
 - Adrenal tumour
 - Pituitary disorders

Special therapies
Alternative therapies
Nursing procedures
Drugs used in treatment of disorders of endocrine system

Unit IX: Nursing management of patients (adults including elderly) with disorders of Integumentary system

- Review of anatomy and physiology of Skin and appendages
- Nursing Assessment – History and Physical Assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics and nursing management of disorders of skin and its appendages
 - Lesions and abrasions
 - Infection and infestations; Dermatitis
 - Dermatoses; infectious and Non infectious
 - “ inflammatory dermatoses”
 - Acne Vulgaris
 - Psoriasis
 - Malignant melanoma
 - Alopecia

Special therapies
Alternative therapies
Nursing procedures
Drugs used in treatment of disorders of Integumentary system

Unit X: Nursing management of patients (adults including elderly) with musculo skeletal problems

- Review of anatomy and physiology of musculo skeletal system
- Nursing Assessment – History and Physical Assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics and nursing management of
- Disorders of :
 - Muscles, Ligaments and Joints – inflammation, infection, trauma
 - Bones – inflammation, infection, dislocation, fracture, tumour and trauma
 - Osteomalacia and osteoporosis
 - Arthritis
 - Congenital deformities
 - Spinal column – defects and deformities, Tumor, Prolapsed inter vertebral disc, pott's spine
 - Paget's disease
- Amputation
- Prosthesis
- Transplant and replacement surgeries

- Rehabilitation, Special therapies, alternative therapies

Nursing procedures

Drugs used in treatment of disorders of musculo skeletal system

Unit XI: Nursing management of patients (adults including elderly) with Immunological problems

- Review of anatomy and physiology of Immune system
- Nursing Assessment – History and Physical Assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics and nursing management of
- Immuno deficiency disorder
- Primary immune deficiency.
- Phagocyte dysfunction
- B-cell and T-cell deficiencies
- Secondary immunodeficiencies
- Acquired immunodeficiency syndrome (AIDS)
- Incidence of HIV & AIDS
- Epidemiology
- Transmission – Prevention of Transmission
- Standard safety precautions
- Role of Nurse; Counseling
- Health education and home care consideration
- National AIDS control program – NACO, various national and international agencies
- Infection control program
- Rehabilitation
- Special therapies, alternative therapies
- Nursing procedures
- Drugs used in treatment of disorders of immunological system

Unit XII: Nursing management of patients (adults including elderly) with communicable diseases:

- Overview of infectious disease, the infectious process
- Nursing Assessment – History and Physical Assessment
- Epidemiology, infectious process, clinical manifestations, diagnosis, treatment, prevention and dietetics. Control and eradication of common communicable Diseases –
 - Tuberculosis
 - Diarrhoeal diseases
 - Hepatitis A-E
 - Herpes
 - Chicken pox
 - Small pox

- Typhoid
 - Meningitis
 - Gas gangrene
 - Leprosy
 - Dengue
 - Plague
 - Malaria
 - Diphtheria
 - Pertussis
 - Poliomyelitis
 - Measles
 - Influenza
 - Tetanus
 - Yellow fever
 - Filariasis
- Reproductive Tract Infections
 - Special Infection control measures: Notification, Isolation, Quarantine, Immunization, Infectious Disease Hospitals
- Special therapies, alternative therapies
- Nursing procedures
- Drugs used in treatment of communicable disease.

Unit XIII: **Peri operative nursing:**

- Organization and Physical set up of the Operation Theatre (OT):
 - Classification
 - O.T Design
 - Staffing
 - Members of the OT team
 - Duties and responsibilities of nurse in O.T
 - Principles of Health and operating room attire
 - Instruments
 - Sutures and suture materials
 - Equipments
 - O.T tables and sets for common surgical procedures
 - Scrubbing procedures
 - Gowning and gloving
 - Preparation of O.T sets
 - Monitoring patient during surgical procedures
- Maintenance of therapeutic environment in O.T
- Standard safety measures

- Infection control; fumigation, disinfection and sterilization
- Biomedical waste management
- Prevention of accidents and hazards in O.T
- Anaesthesia
 - Types
 - Methods of administration
 - Effects and Stages
 - Equipments
 - Drugs
- Cardio Pulmonary Resuscitation (CPR)
- Pain management techniques
- Legal aspects

Unit XIV: Biomedical Waste Management *

- ❖ Introduction
 - What is Biomedical Waste Management
 - Risk from Biomedical Waste Management If not managed properly
 - Environmental Hazard
 - Occupational Hazard
 - Public Health Hazard
 - Advantages of proper Management of Bio Medical waste
- ❖ Legal Provision
 - Salient features of Biomedical Waste Management
 - Categories of Biomedical Waste
 - Category wise Treatment and Disposal Methodology
 - Segregation, Packaging ,storage and transportation
- ❖ Occupational Safety and health of health care worker
 - ⌚ Occupational risk of chemical reactions
 - ⌚ Disease transmission
 - ⌚ Nurses safety
 - ⌚ Role of Nurse in Biomedical Waste Management
- ❖ Bio Medical Waste Management
 - Bio Medical Waste Management in Hospitals where common Bio medical waste Management Facility is Not Available
 - Bio Medical Waste Management in Hospitals where common Bio medical waste Management Facility is Available

- Bio Medical Waste Management in primary Health centers and small scale Hospitals in Rural Areas
- Unit Wise Generation of Bio Medical Waste and its Requirement
- Facilities Required for Managing Bio Medical Waste
- Do's and Don't In Bio-Medical Waste Management

❖ **Management Structure and Assignment of Responsibilities**

The teaching learning activities will be in the form of Lecture discussions, demonstrations, practice session, supervised clinical practice, seminar, case discussion, explaining using charts, slides, models, films, graphs, Drug book presentation, health education, participation in blood donation camps, visit to blood bank, counseling, orientation visit to hospital etc.

The internal assessment will be done through tests consisting of essay type, short answer questions, assessment of skills with check list, Assessment of patient management problem.

MEDICAL SURGICAL NURSING

(ADULT INCLUDING GERIATRICS) – I

**Placement: Second year
hours**

Duration: Practical – 720

The objectives are:

- To provide nursing care to adult patients with medical disorders
- Counsel and educate patients and families
- To provide pre and post operative nursing care to adult patients with surgical disorders
- Counsel and educate patients and families
- To provide nursing care to patients with cardiac disorders
- Counsel and educate patients and families
- To identify skin problems
- To provide nursing care to patients with skin disorders and communicable diseases
- Counsel and educate patients and families
- To provide nursing care to patients with musculo skeletal disorders
- Counsel and educate patients and families
- To identify instruments used in common operations
- To participate in Infection control practices in the Operation Theatre
- Set-up the table / trolleys for common operative procedures
- Assist in giving anaesthesia
- Assist in the operative procedures
- Provide peri operative nursing care
- To gain proficiency in ICU nursing
- To develop advance skill in special procedures used in critical care unit
- To identify potential problems and provide accordingly.
- Skill in setting and handling ventilator
- Administer injection in infusion pump
- To record accurately findings and medications
- To develop IPR with family members
- To acquaint with OT technique.
- To develop skill in neurological assessment
- Give care to the patient with head injury and spinal injury.
- Care with chest surgery and cranial surgery
- To assess the severity of burns
- To administer rehydration therapy
- Observe reconstructive surgery
- To identify instrument
- To assist in OT set up
- Supervise sterilization
- Assist in OT table lay out
- Observe immediately after operation
- Supervise infection control

Areas:

General Medical Ward (Respiratory, GI, Endocrine, Renal, Hematology)

- Assessment of the patient
 - Taking History
 - Perform general and specific physical examination
 - Identify alterations and deviations
- Practice medical surgical asepsis – Standard safety measures
- Administer medications
 - Oral, IC, IM, Subcutaneous
- IV therapy
 - IV cannulation

Maintenance and monitoring

- Oxygen therapy by different methods
- Nebulization
- Chest physiotherapy
- Naso gastric feeding
- Assist in common diagnostic
- Perform / Assist on therapeutic procedures
- Blood and component therapy
- Throat suctioning
- Collect specimens for common investigations
- Maintain elimination
 - Catheterization
 - Bowel wash
 - Enema
 - Urinary drainage
- ❖ Maintain intake, output and documentation
- ❖ Counsel and teach related to specific disease conditions

General Surgical Ward: (GI, Urinary CTVS)

- Practice medical surgical asepsis – Standard safety measures.
- Pre operative preparation of patients
- Post operative care – Receiving pt, assessment, monitoring care
- Care of wounds and drainage
- Suture removal
- Ambulation and exercise
- Naso gastric aspiration
- Care of chest drainage
- Ostomy care
 - Gastrostomy
 - Colostomy
 - Enterostomy

- Blood and component therapy
- Practice universal precautions

Cardiology ward

- Physical examination of the cardio vascular system Recoding and interpreting ECG
- Monitoring of patients
- Preparation and assisting in non-invasive and invasive diagnostic procedures
- Administer cardiac drugs
- Cardio pulmonary Resuscitation
- Teach patients and families
- Practice, medical and surgical asepsis – Standard safety measures

Skin and communicable diseases ward:

- Assessment of patients with skin disorders
- Assist in diagnostic and therapeutic procedures
- Administer topical medication
- Practice medical surgical asepsis – Standard safety measures
- Use of personal protective equipment (PPE)
- Give Medicated baths
- Counseling HIV positive patients
- Teach prevention of infectious diseases

Orthopaedic ward:

- Assements of orthopaedic patients
- Assis in application of plaster cast and removal of cast
- Apply skin traction – buck's extension traction
- Assist in application and removal of prosthesis
- Physiotherapy – Range of motion exercised (ROM), muscle strengthening exercises
- Crutch maneuvering technique
- Activities of daily living
- Ambulation
- Teach and counsel patients and families

Operation Theatre:

- Scrubbing, gowning and gloving
- Identify instruments used in common operations
- Disinfection, Carbolization, fumigation, Prepartion of instrument sets for common operations
- Sterilization of sharps and other instruments
- Prepare the OT table depending upon the operation
- Positioning and monitoring of patients
- Endotracheal intubation
- Assisting in minor and major operations
- Handling specimens

- Disposal of waste as per the guidelines

Assignments :

- Plan and give care to 3-4 assigned patients
- Nursing care plan – 2
- Nursing care study / presentation / Health talk– 1
- Drug presentation – 1
- Maintain drug book
- Maintain practical record book
- Plan and give care to 2-3 assigned patients
- Counseling HIV patients and families -1
- Assist as a circulatory nurse in major cases – 10
- Minor cases 3-5
- Assist as a scrub nurse in major cases – 10
- Minor cases 5

The internal assessment will be in the form of assessing clinical performance with rating scale, assess each skill with check list, evaluation of case study, observation report and health talk, completion of practical record, activity record.

Internship

Duration – 260 hours

The objectives are :

- To gain proficiency in ICU nursing
- Develop advance skill in special procedures used in critical care unit
- Identify potential problems and provide accordingly
- Skill in setting and handling ventilator
- Administer injection in infusion pump
- Record accurately findings and medications
- Develop IPR with family members
- Acquaint with OT technique.
-

Areas: ICU, CCU, CARDIAC OT

- Assist in arterial puncture for blood gas analysis
- Perform ECG and interpret accordingly conduct and analysis pulse oximetry
- Care with artificial airway
- Assist in endotracheal intubation
- Setting up ventilator
- Giving care in ventilator
- Drug sheet
- Observation of special procedure in OT.

Areas: Neuro ICU, ITU, OT

- Assess neurological status
- Implement care to head injury, spinal injury patients
- Drug sheet
- Pre and post operative care with neuro surgery patients

Areas: Burns and plastic Reconstructive surgery

- Nursing care

Assignments:

- Arterial puncture – 5
- Taking out ECG stripe – 5
- Tracheal suction - 5
- for all assigned patients
- oxygen administration by CPAP mask and use Ambu bag
- Assessment for all assigned patients
- Nursing care with ventilator
- Drug sheet
- Assist cases
- The assessment will be done through record book, checking with supervisor, observation check list.

COMMUNITY HEALTH NURSING – I

Placement : Second year

Duration : Theory – 90 (105) hours

Practical – 135 hours

Course Description: This course is designed for students to appreciate the principles of promotion and maintenance of health.

The learning objectives are:

- The concept and dimensions of health
- The determinants of health
- The concept, scope, uses, methods and approaches of epidemiology
- The epidemiology and nursing management of common communicable diseases, common non - communicable diseases
- The concepts and scope of demography
- The methods of data collection, analysis and interpretation of demographic data
- The impact of population explosion in India
- The methods of population control

Unit I : Introduction

- Community Health Nursing
- Definition, concept and dimensions of health
- Promotion of health
- Maintenance of health

Unit II: Determinants of health

- Eugenics
- Environment:
 - Physical: Air, light, Ventilation, Water, Housing, Sanitation; disposal of waste, disposal of dead bodies, Forestation, Noise, Climate, Communication: infrastructure facilities and Linkages
 - Acts regulating the environment: infrastructure facilities and linkages
 - Acts regulating the environment : National Pollution control board
 - Bacterial & viral: Agents, host carriers and immunity
 - Arthropods and Rodents
- Food Hygiene: Production, Preservation, Purchase, Preparation, Consumption
- Acts regulating food hygiene – Prevention of food adulteration act, Drugs and cosmetic act

- Socio – cultural
 - Customs, taboos
 - Marriage systems
 - Family structure
 - Status of special groups; Females, Children, Elderly, challenged groups and sick persons
- Life style
- Hygiene
- Physical activity
 - Recreation and sleep
 - Sexual life
 - Spiritual life philosophy self reliance
 - Dietary pattern
 - Education
 - Occupation
- Financial Management
 - Income
 - Budget
 - Purchasing power
 - Security

Unit III: **Epidemiology**

- Definition, concept, aims, scope uses and terminology used in epidemiology
- Dynamics of disease transmission: epidemiological triad
- Morbidity and mortality: measurements
- Levels of prevention
- Methods of epidemiology of
 - Descriptive
 - Analytical: Epidemic investigation
 - Experimental

Unit IV: **Epidemiology and nursing management of common communicable disease**

- Respiratory infections
 - Small pox
 - Chicken pox
 - Measles
 - Influenza
 - Rubella
 - ARI's & Pneumonia
 - Mumps
 - Diphtheria

- Whooping cough
 - Meningococcal meningitis
 - Tuberculosis
 - SARS
- Intestinal Infections
 - Poliomyelitis
 - Viral Hepatitis
 - Cholera
 - Diarrhoeal diseases
 - Typhoid fever
 - Food poisoning
 - Amoebiasis
 - Hook worm infection
 - Ascariasis
 - Dracunculiasis
- Arthropod infections
 - Dengue
 - Malaria
 - Filariasis
- Zoonoses Viral
 - Rabies
 - Yellow fever
 - Japanese encephalitis
 - Kyasanur Forest Disease
- Bacterial
 - Brucellosis
 - Plague
 - Human Salmonellosis
 - Anthrax
 - Leptospirosis
- Rickettsial diseases
 - Rickettsial Zoonoses
 - Scrub typhus
 - Murine typhus
 - Tick typhus
 - Q fever
- Parasitic zoonoses
 - Taeniasis
 - Hydatid disease
 - Leishmaniasis
- Surface infection
 - Trachoma

- Tetanus
- Leprosy
- STD & RTI
- Yaws
- HIV / AIDS

Any other

Unit V: Epidemiology and nursing management of common non-communicable disease

- Malnutrition: under nutrition, over nutrition, nutritional deficiencies
- Anaemia
- Hypertension
- Stroke
- Rheumatic, Heart Disease
- Coronary Heart Disease
- Cancer
- Diabetes mellitus
- Blindness
- Accidents
- Mental illness
- Obesity
- Iodine Deficiency
- Fluorosis
- Epilepsy

Unit VI: Demography

- Definition, concept and scope
- Methods of collection, analysis and interpretation of demographic data
- Demographic rates and ratios

Unit VII: Population and its control

- Population explosion and its impact on social, economic development of individual, society and country
- Population Control
- Overall development: Women empowerment, social economic and educational development
- Limiting family size:
 - Promotion of small family norm
 - Methods: spacing(natural, biological, chemical, mechanical methods etc)
 - Terminal: surgical methods
 - Emergency contraception

Unit: VIII – Multidisciplinary nature of environmental studies *

- Definition, Scope and importance
- Need for public awareness

Unit: IX - Environmental Pollutions *

- Definition
- Cause, effects and control measures of:-
 - Air pollution
 - Water pollution
 - Soil pollution
 - Marine pollution
 - Noise pollution
 - Thermal pollution
 - Nuclear pollution
- Solid waste Management : Causes, effects and control measures of urban and industrial waste
- Role of an individual in prevention of pollution
- Pollution case studies
- Disaster management : floods, earthquake, cyclone and landslides

The teaching learning activities will be in the form of Lecture discussions demonstration explaining using charts, slides, models, films, seminar, supervised practice – health centres, clinics and homes, group projects/ health education, visits to water supply, slaughter house etc, counseling,

The internal assessment will be done through tests consisting of essay type, short answer questions, Assessment survey report.

COMMUNITY HEALTH NURSING – I**Placement: Second year****Duration: Practical – 135 hours**

The objectives are:

- Build and maintain rapport
- Identify demographic characteristics, health determinants and community health resources
- Diagnose health needs of individual and families
- Provide primary care in health centre
- Counsel and educate individual, family and community

Unit: X – Field Work *

- Visit to a local area to document environmental assets- river/forest/grassland/hill/mountain
- Visit to a local polluted site-Urban/Rural/Industrial/Agriculture
- Study of common plants, insects, birds
- Study of simple ecosystems-pond, river, hill, slopes, etc.

SKILLS

- Use techniques of interpersonal relationship
- Identification of health determinants of community
- History taking
- Physical examination
- Collect specimens – sputum, malaria, smear
- Perform simple lab tests at centre – blood for Haemoglobin and sugar, urine or albumin and sugar
- Administer vaccines and medications to adults
- Counsel and teach individual, family and community
 - Nutrition
 - Hygiene
 - Self health monitoring
 - Seeking health services
 - Healthy life style
 - Family welfare methods
 - Health promotion

Assignments:

- To work with 2 assigned families each in urban and rural
- Family study – 1
- Observation report of community – 1
- Health talks 2 (1 in urban and in rural)

The internal assessment will be in the form of assessing clinical performance with rating scale, assess each skill with check list, evaluation of family study, observation report and health talk, completion of activity record.

COMMUNICATION AND EDUCATIONAL TECHNOLOGY

**Placement: Second year
hours**

Duration: Theory – 90

Course Description: This course is designed to help the students acquire an understanding of the principles and methods of communication and teaching. It helps to develop skill in communicating effectively, maintaining effective interpersonal relations, teaching individuals and groups in clinical, community health and educational settings.

The learning objectives are:

- To know the communication process.
- Identify techniques of effective communication
- Establish effective inter-personal relations with patients, families and co-workers
- Develop effective human relations in context of nursing
- Develop basis skill of counseling and guidance
- The philosophy and principles of education
- The teaching learning process
- The teaching skill using various teaching methods in clinical, classroom and community settings.

Unit I: Review of Communication process

- Process; elements and channel
- Facilitators
- Barriers and methods of overcoming
- Techniques

Unit II: Interpersonal relations

- Purpose and types
- Phases
- Barriers and methods of overcoming
- Johari Window

Unit III: Human relations

- Understanding self
- Social behavior, motivation, social attitudes
- Individual and groups
- Groups and individual
- Human relations in context of nursing
- Group dynamics
- Team work

Unit IV: Guidance & Counseling

- Definition
- Purpose, scope and need
- Basic principles
- Organization of counseling services
- Types of counseling approaches
- Role and preparation of counselor
- Issues for counseling in nursing: students and practitioners
- Counseling process – steps and techniques, tools of counselor
- Managing disciplinary problems
- Management of crisis and referral

Unit V: Principles of education and teaching learning process

- Education: meaning, philosophy, aims, functions and principles
- Nature and characteristics of learning
- Principles and maxims of teaching
- Formulating objectives; general and specific
- Lesson planning
- Classroom management
- **Curriculum Development ***
 - **Meaning and Concepts**
 - **Factors influencing curriculum development in Nursing education**
 - **Principles of Curriculum development**
 - **Components of nursing curriculum**
 - **Curriculum planning & organization**
 - **Curriculum evaluation & curriculum revision**

Unit VI: Methods of teaching

- Lecture, demonstration, group discussion, seminar, symposium, panel discussion, role play, project, field trip, workshop, exhibition, programmed instruction, computer assisted learning, microteaching problem based learning, Self instructional module and simulation etc.
- Clinical teaching methods: case method, nursing round and reports, bedside clinic, conference (individual and group process recording)

Unit VII: Educational media

- Purposes and types of A.V Aids, principles and sources etc.
- Graphic Aids: chalk boards, chart, graph, poster, flash cards, flannel graph, bulletin, cartoon
- Three dimensional aids: objects, specimens, models, puppets
- Printed aids: Pamphlets and leaflets
- Projected aids: slides, overhead projector, films TV, VCR / VCD camera, microscope, LCD
- Audio aids: tape recorder, public address system
- Computer.

Unit VIII: Assessment

- Purpose and scope of evaluation and assessment

- Criteria for selection of assessment techniques and methods
- Assessment of knowledge: essay type questions (SAQ), Multiple choice questions (MCQ)
- Assessment of skills: observation check list, practical exam, Viva, Objective structured clinical examination (OSCE)
- Assessment of Attitudes: Attitude scales

Unit IX: Information, Education & communication for health (IEC)

- Health behavior and health education
- Planning for health education
- Health education with individual, groups and communities
- Communicating health messages
- Methods and media for communicating health messages
- Using mass media

The teaching learning activities will be in the form of Lecture discussions, role plays, exercised with audio / video tapes, sociometry, role play on counseling in different situations followed by discussion, prepare lesson plan, micro teaching, exercise in writing objective, conducting teaching sessions using different methods and media, exercise on writing different types of assessment tools, Plan and conduct health sessions for individuals, group and communities

The internal assessment will be done through tests consisting of essay type, short answer questions, assessing the teaching aid prepared, assessing the strategies used in practice teaching sessions and exercise sessions, planning and conduct of the educational session.

MEDICAL SURGICAL NURSING (ADULT INCLUDING GERIATRICS) – II

**Placement: Third year
Practical – 270 hours**

Duration: Theory 120 hours

Course Description: The purpose of this course is to acquire knowledge and develop proficiency in caring for patients with medical and surgical disorders in varieties of health care settings and at home.

The learning objectives are:

- To know the etiology, patho-physiology, clinical manifestations, diagnostic measures and management of patients with disorders of Ear, Nose and Throat, disorders of eye, neurological disorders, and disorders of female reproductive system.
- The concepts of reproductive health and family welfare programme
- To know the etiology, patho-physiology, clinical manifestations, diagnostic measures and management of patients with burns, reconstructive and cosmetic surgery, patients with oncology.
- Organization of emergency and disaster services
- The role of nurse in disaster management
- The role of nurse in management of common emergencies
- The concept and problems of aging
- Nursing care of the elderly
- To know organization of critical care units
- The role of nurse in management of patients in critical care units
- To know the etiology, patho-physiology, clinical manifestations, diagnostic measures and management of patients with occupational and industrial health disorder

Unit I: Nursing management of patients with disorders of Ear, Nose & Throat

- Review of anatomy and physiology of the Ear, Nose and Throat
- Nursing Assessment – History and Physical Assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics and nursing management of Ear, Nose and Throat disorders:
 - External ear: deformities otalgia, foreign bodies and tumors
 - Middle Ear – Impacted wax, Tympanic membrane perforation, otitis media, otosclerosis, mastoiditis, tumors
 - Inner ear – Meniere's Disease, labyrinthitis, ototoxicity, tumours
 - Upper airway infections – Common cold, sinusitis, ehtinitis, rhinitis, pharyngitis, tonsillitis and adenoiditis, peritonsillar abscess, laryngitis
 - Upper respiratory airway – epistaxis
 - Nasal obstruction, laryngeal obstruction, cancer of the larynx
 - Cancer of the oral cavity
 - Speech defects and speech therapy
 - Deafness –

- Prevention, control and rehabilitation
- Hearing aids, implanted hearing devices

Special therapies, Nursing procedures

Drugs used in treatment of disorders of Ear, Nose and Throat

Role of nurse communicating with hearing impaired and muteness.

Unit II: Nursing management of patients with disorders of eye

- Review of anatomy and physiology of the eye.
- Nursing Assessment – History and Physical Assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics and nursing management of eye disorders:
 - Refractive errors
 - Eyelids – infection, tumours and deformities
 - Conjunctiva – inflammation and infection, bleeding
 - Cornea – inflammation and infection
 - Lens – Cataracts
 - Glaucoma
 - Disorder of the uveal tract
 - Ocular tumours
 - Disorders of posterior chamber and retina: Retinal and vitreous problems
 - Retinal detachment
 - Ocular emergencies and their prevention
 - Blindness
- National blindness control program
 - Eye banking
 - Eye prostheses and Rehabilitation

Role of a nurse – Communication with visually impaired patient, Eye camps

Special therapies

Nursing procedures

Drugs used in treatment of disorders of eye.

Unit III: Nursing management of patients with neurological disorders

- Review of anatomy and physiology of neurological system
- Nursing Assessment – History and Physical and neurological assessment and Glasgow coma scale
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical, surgical, dietetics and nursing management of neurological disorders
- Congenital malformations
- Headache
- Head injuries
- Spinal injuries
 - Paraplegia
 - Hemiplegia
 - Quadriplegia

- Spinal cord compression – herniation of nvertibral disc
 - Tumours of the brain & spional cord
 - Intra cranial and cerebra; aneurysms
 - Infections
 - Meningitis, Encephalitis, Brain abscess, neurocysticercosis
 - Movement disorders
 - Chorea
 - Seizures
 - Epilepsies
 - Cerebro Vascular Accidents (CVA)
 - Cranial, Spinal Neuropathies – Bell’s palsy, trigeminal neuralgia
 - Peripheral Neuropathies; Guilliaian – Barr’e Syndrome
 - Myasthenia gravis
 - Multiple sclerosis
 - Degenerative diseases
 - Delirium
 - Dementia
 - Alzheimer’s disease
 - Parkinson’s disease
 - Management of unconscious patients and patients with stoke
 - Role of the nurse in communicating with patient having neurological deficit
- Role of nurse in long stay facility (institutions) and at home
- Special therapies
- Nursing procedures
- Drugs used in treatment of neurological disorders.

Unit IV: Nursing management of patients with disorders of female reproductive system

- Review of anatomy and physiology of the female reproductive system
- Nursing Assessment – History and Physical assessment
- Breast Self examination
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical & surgical management of disorder of female reproductive system
- Congenital abnormalities of female reproductive system
- Sexuality and Reproductive Health
- Menstrual Disorders;
- Dysmenorrheal, Premenstrual Syndrome
- Abnormal Uterine Bleeding;
- Menorrhagia, Metrorrhagia
- Pelvic Inflammatory Disease
- Ovarian and fallopian tube disorders; infections, cysts, tumours
- Uterine and cervical disorders; Endometriosis, polyps, Fibrioids, Cervical and uterine tumours, uterine displacement, Cystocele / Urethrocele / Rectocele
- Vaginal disorders; Infections, cysts, tumours

- Diseases of breasts; Deformities, Infections, Cysts and Tumours
- Menopause and Hormonal Replacement Therapy
- Infertility
- Contraception; Type Methods, Risk and effectiveness
 - Spacing methods
 - Barrier methods, Intra uterine devices, Hormonal, Post Contraception Methods, etc
 - Terminal methods
 - Sterilization
- Emergency Contraception methods
- Abortion – Natural, Medical and surgical abortion – MTP Act
- Toxic Shock Syndrome
- Injuries and Trauma; Sexual violence

Special therapies

Nursing procedures

Drugs used in treatment of Gynaecological disorders

National family welfare programme

Unit V: Nursing management of patients with Burns, reconstructive and cosmetic surgery

- Review of anatomy and physiology of the skin and connective tissues and various deformities
- Nursing Assessment – History and Physical assessment and Assessment of burns and fluid and electrolyte loss
- Etiology, Classification, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical & surgical management of burns and Re-constructive and Cosmetic surgery
- Types of Re-constructive and Cosmetic surgery; for burns, congenital deformities, injuries and cosmetic purposes
- Role of nurse
- Legal aspects
- Rehabilitation
- Special therapies
 - Psycho social aspects

Nursing procedures

Drugs used in treatment of Burns, reconstructive and cosmetic surgery

Unit VI: Nursing management of patients with oncological conditions

- Structure and characteristics of normal and cancer cells
- Nursing Assessment – History and Physical assessment
- Prevention, Screening, Early detection, Warning signs of cancer
- Epidemiology, Etiology, Classification, Pathophysiology, Staging, clinical manifestations, diagnosis, treatment modalities and medical & surgical management of oncological conditions

- Common malignancies of various body systems; Oral, larynx, lung, Stomach and Colon, Liver, Leukemias and lymphomas, Breast, Cervix, Renal, Bladder, Prostate etc
- Oncological disorders
- Modalities of treatment
 - Immunotherapy
 - Chemotherapy
 - Radiotherapy
 - Surgical Interventions
 - Stem cell and Bone marrow transplants
 - Gene therapy
 - Other forms of treatment
- Psychological aspects of cancer
- Rehabilitation
- Palliative care: Symptom and Pain Management, Nutritional support
- Home care
- Hospice
- Stomal therapy
 - Psycho social aspects
- Nursing procedures

Unit VII: Nursing management of patients with Emergency and Disaster situations

Disaster Nursing

- Concepts and principles of Disaster Nursing
- Causes and Types of Disaster: Natural and Manmade:
 - Earthquakes, Flood, Epidemics, Cyclones
 - Fire, Explosion, Accidents
 - Violence, Terrorism; bio-chemical, War
- Policies related to emergency ./ disaster management; International, national, state institutional
- Disaster preparedness:
- Team, Guidelines, protocols, equipments, Resources
- Coordination and involvement of; Community, various govt departments, non govt. organizations and International agencies
- Role of nurse: working
- Legal Aspects of Disaster Nursing
- Impact on Health and after effects; Post Traumatic Stress Disorder
- Rehabilitation; physical, psycho – social, Financial, Relocation

Emergency Nursing

- Concepts, priorities, principles and Scope of Emergency Nursing
- Organization of emergency services: physical set up, staffing, equipment and supplies, protocols, Concepts of triage and role of triage nurse
- Coordination and involvement of different departments and facilities

- Nursing Assessment History and Physical Assessment
- Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical and surgical nursing management of patient with medical and surgical emergency
- Principles of emergency management
- Common emergencies;
- Respiratory emergencies
- Shock and Haemorrhage
- Pain
- Poly – Trauma, road accidents, crush injuries, wound
- Bites
- Poisoning
- Seizures
- Thermal Emergencies; Heat stroke & cold injuries
- Psychiatric Emergencies
- Obstetrical Emergencies
- Violence, Abuse, Sexual assault
- Cardio Pulmonary Resuscitation
- Crisis prevention
- Role of the nurse; Communication and Inter Personal Relations
- Medico – legal Aspects;

Unit VIII: Nursing care of the elderly

- Nursing Assessment – History and Physical assessment
- Ageing;
- Demography; Myths and realities
- Concepts and theories of ageing
- Cognitive Aspects of Ageing
- Normal biological ageing
- Age related body systems changes
- Psychosocial Aspects of Aging
- Medications and elderly
- Stress and coping in older adults
- Common health problems and Nursing Management
- Cardiovascular, Respiratory, Musculoskeletal
- Endocrine, genito – urinary, gastrointestinal
- Neurological, Skin and other sensory organs
 - Psychosocial and Sexual abuse of elderly
- Role of nurse for caregivers of elderly
- Role of family and formal and non formal caregivers
- Use of aids and prosthesis (hearing aids, dentures)
- Legal and Ethical Issues
- Provisions and Programmes for elderly; privileges, Community Programs and health services;

- Home and institutional care

Unit IX: Nursing management of patient in critical care units

- Nursing Assessment – History and Physical assessment
- Classification
- Principles of critical care nursing
- Organization: physical setup, policies, staffing norms,
- Protocols, equipment and supplies
- Special equipments and supplies
- Special equipments; ventilators, cardiac monitors, defibrillators
- Resuscitation equipments
- Infection Control Protocols
- Nursing management of critically ill patient
- Monitoring of critically ill patient
- CPR – Advance Cardiac Life support
- Treatments and procedures
- Trnational care
- Ethical and Legal Aspects
- Communication with patient and family
- Intensive care records
- Crisis Intervention
- Death and Dying – coping with
- Drugs used in critical care unit

Unit X: Nursing management of patients with adults including elderly with Occupational and Industrial disorders

- Nursing Assessment – History and Physical assessment
 - Etiology, Pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical and surgical nursing management of occupational and industrial health disorders
 - Role f nurse
- Special therapies, alternative therapies, Nursing procedures
Drugs used in treatment of Occupational and Industrial disorders

The teaching & learning activities will be in the form of Lecture discussions, demonstrations, practice session, supervised clinical practice, seminar, case discussion, explaining using charts, slides, models, films, graphs, Drug book presentation, health education, participation in eye camps visit to eye bank, counseling, orientation visit to eye hospital, visit to rehabilitation centre, Disaster management drills, visit to old age home, etc.

The internal assessment will be done through tests consisting of essay type, short answer questions, assessment of skills with check list, Assessment of patient management problem

MEDICAL SURGICAL NURSING
(ADULT INCLUDING GERIATRICS) – II PRACTICAL

Placement: Third year

Duration: Theory – 120 hours

Practical –270 hours

Internship – 430 hours

The objectives are:

- To provide care to patients with ENT disorders
- Counsel and educate patients and families for grief and bereavement
- To provide care to patients with Eye disorders
- Counsel and educate patients and families
- To provide care to patient with neurological disorders, gynecological disorders, patients with burns, , patients with cancer, critically ill patients, patients in emergency and disaster situation

Areas: ENT

- Perform examination of ear, nose and throat
- Assist with diagnostic procedures
- Assist with therapeutic procedures
- Instillation of drops
- Perform / assist with irrigations
- Apply ear bandage
- Perform tracheotomy care
- Teaching patients and families

Ophthalmology:

- Perform examination of eye
- Assist with diagnostic procedures
- Assist with therapeutic procedures
- Perform / assist with irrigations
- Apply eye bandage
- Apply eye drops/ointments
- Assist with foreign body removal
- Teaching patients and families

Neurology

- Perform Neurological examination
- Use Glasgow coma scale
- Assist with diagnostic procedures
- Teaching patients and families
- Participate in rehabilitation program

Gynaecology

- Assist with gynaecological Examination
- Assist with diagnostic procedures
- Teaching patients and families
- Teaching self breast examination
- Assist with PAP smear collection

Burns unit Operation Theatre:

- Assessment of the burns patient
 - Percentage of burns
 - Degree of burns
- Fluid and electrolyte replacement therapy
 - Assess
 - Calculate
 - Replace
 - Record intake / output
- Care of Burn wounds
 - Bathing
 - Dressing
- Perform active and passive exercises
- Practice medical and surgical asepsis
- Counsel and Teach patients and families
- Participate in rehabilitation program

Oncology unit

- Screen for common cancers – TNM classification
- Assist with diagnostic procedures
 - Biopsies
 - Pap smear
 - Bone – marrow aspiration
- Breast examination
- Assist with therapeutic procedures
- Participates in various modalities of treatment
 - Chemotherapy
 - Radiotherapy
 - Pain management
 - Stomaltherapy
 - Hormonal therapy
 - Immuno therapy
 - Gene therapy
 - Alternative therapy
- Participate in palliative care
- Counsel and teach patients families

- Self Breast examination
- Warning signs
- Participate in rehabilitation program

Critical care unit

- Monitoring of patients in ICU
- Maintain flow sheet
- Care of patient on ventilators
- Perform Endotracheal suction
- Demonstrators uses of ventilators, cardiac monitors etc
- Collect specimens and interprets ABG analysis
- Assist with arterial puncture
- Maintain CVP line
- Pulse oxymetry
- CPR – ALS
- Defibrillators
- Pace makers
- Bag mask ventilation
- Emergency tray / trolley – Crash cart
- Administration of drugs
 - Infusion pump
 - Epidural
 - Intra thecal
 - Intracardiac
- Total parenteral therapy
- Chest physiotherapy
- Perform active passive exercises
- Counsel the patient and family in dealing with grieving and bereavement

Casualty / Emergency

- Practice “triage”
- Assist with assessment, examination, investigations and their interpretations in emergency and disaster situations
- Assists in documentations
- Assists in legal procedures in emergency unit
- Participate in managing crowd
- Counsel patient and families in grief and bereavement

Assignments:

- Plan and give care to 3-4 assigned patients
- Nursing care plan – 1
- Observation of OPD, Eye bank, burns unit, , cancer unit, critical care unit , emergency unit

- Drug presentation – 1
- Maintain drug book
- Maintain practical record book
- Plan and give care to 2-3 assigned patients
- Counseling HIV patients and families -1
- Assist as as circulatory nurse in major cases – 10
- Minor cases 3-5
- Assist as a scrub nurse in major cases – 10
- Minor cases 5

The internal assessment will be in the form of assessing clinical performance with rating scale, assess each skill with check list, evaluation of case study, observation report and health talk, completion of practical record, activity record.

Placement: **Internship**

Duration – **9 weeks**

Areas: Medical ward, Surgical ward, Critical care unit / ICCU, Casualty / Emergency, Operation Theatre (Eye, ENT, Neuro)

The objectives are:

- To provide comprehensive care to patients with medical and surgical conditions including emergencies
- Assist with common operations

The assessment will be done through clinical performance with rating scale.

CHILD HEALTH NURSING

Placement: Third year

Duration: Theory – 90 hours

Practical – 270 hours

Internship – 145 hours

Course Description: This course is designed for developing an understanding of the modern approach to child – care, identification, prevention and nursing management of common health problems of Neonates and children.

The learning objectives are:

- The modern concept of child care and principles of child health nursing
- The national policy programmes and legislation in relation to child health and welfare
- List major causes of death during infancy, early and late childhood
- The major functions and role of the paediatric nurse in caring for a hospitalized child
- The principles of child health nursing
- The normal growth and development children at different ages
- To identify the needs of children at different ages and provide parental guidance
- To identify the nutritional needs of children at different ages and ways of meeting the needs
- To appreciate the role of play for normal and sick children
- To appreciate the preventive measures and strategies for children
- To provide care to normal and high risk neonates
- To perform neonatal resuscitation
- To recognize and manage common neonatal problems
- To provide nursing care in common childhood diseases
- To identify measures to prevent common childhood diseases including immunization
- To manage the child with behavioural and social problems
- To identify the social and welfare services for challenged children

Unit I : Introduction to Modern concepts of child care

- Internationally accepted rights of the child
- National policy and legislations in relation to child health and welfare
- National programmes related to child health and welfare
- Agencies related to welfare services to the children
- Changing trends in hospital care, preventive, promotive and curative aspects of child health
- Child morbidity and mortality rates
- Differences between an adult and child
- Hospital environment for a sick child
- Impact of hospitalisation on the child and family
- Grief and bereavement
- The role of a Child health nurse in caring for a hospitalized child

- Principles of pre and post operative care of infants and children
- Child nursing procedures

Unit II: The healthy child

- Principles of growth and development
- Factors affecting growth and development
- Growth and development from birth to adolescence
- The needs of normal children through the stages of developmental and parental guidance
- Nutritional needs of children and infants: Breast feeding, exclusive breast feeding supplementary/artificial feeding and weaning
- Baby friendly hospital concept
- Accidents : causes and prevention
- Value of play and selection of play material
- Preventive immunization, immunization programme and cold chain
- Preventive paediatrics
- Care of under 5 and under 5 clinics / well baby clinics

Unit III: Nursing care of neonate

- Nursing care of a normal new born / essential new born care
- Neonatal resuscitation
- Nursing management of a low birth weight baby
- Kangaroo mother care
- Nursing management of common neonatal disorders
- Organisation of neonatal unit
- Identification and nursing management of common congenital malformations

Unit IV: Integrated management of neonatal and childhood illness (IMNCI)

Unit V: Nursing management in common childhood diseases

- Nutritional deficiency disorders
- Respiratory disorders and infections
- Gastrointestinal infections, infestations and congenital disorders
- Cardio vascular problem: congenital defects and rheumatic fever, rheumatic heart disease
- Genito – urinary disorders: acute glomerulonephritis, nephritic syndrome, Wilms' tumor, infection congenital disorders
- Neurological infections and disorders: convulsions, epilepsy, meningitis, hydrocephalus, spina-bifida
- Hematological disorders: anemias, thalassemia, ITP , Leukemia, hemophilia
- Endocrine disorders :juvenile diabetes mellitus
- Orthopedic disorders : clubfeet, hip dislocation and fracture
- Disorders of skin, eye and ears
- Common communicable diseases in children, their identification, nursing management in hospital and home and prevention

- Child health emergencies: poisoning foreign bodies hemorrhage, burns and drowning
- Nursing care of infant and children with HIV /eights.

Unit VI: Management of behavioral and social problems in children

- Management of common behavioural disorders
- Management of common psychiatric problems
- Management of challenged children : Mentally, physically and socially challenged
- Welfare services for challenged children in India
- Child guidance clinics

The teaching learning activities will be through lecture discussion, demonstration of common paediatric procedures, developmental study of infant and children , observation study of normal and sick child, field visit to Anganwadi, child guidance clinic, film show on breast feeding , clinical practice/field, workshop on neonatal resuscitation.

The internal assessment will be done through short answer objective type, assessment of field visits and developmental study report, assessment of skills with checklist

CHILD HEALTH NURSING PRACTICAL

**Placement: Third year
Fourth year**

**Duration: – 270 hours (9 weeks)
Internship – 145 hours (3 weeks)**

The learning objectives are:

- Provide nursing care to children with various medical disorders
- Counsel and educate parents
- Recognize different paediatric surgical conditions / malformations
- Provide pre and post operative care to children with common paediatric surgical conditions / malformation
- Counsel and educate parents
- Perform assessment children: Health, Developmental and Anthropometric
- Perform immunization
- Give health Education / Nutritional Education
- Provide nursing care to critically ill children

Areas & Skills

Paediatric Medicine Ward

- Taking Paediatric History
- Physical examination and assessment of children
- Administer of oral I/M and IV medicine / fluids
- Calculation of fluid requirements
- Prepare different strengths of I.V fluids
- Apply restraints
- Administer O2 inhalation by different methods
- Give baby bath
- Feed children by Katori spoon etc.
- Collect specimens for common investigations.
- Assists with common diagnostic procedures
- Teach mothers / parents
 - Malnutrition
 - Oral rehydration therapy
 - Feeding and Weaning
 - Immunization schedule
 - Play therapy
 - Specific Disease conditions

Paediatric Surgery Ward

- Calculate, prepare and administer I/V fluids
- Do bowel wash
- Care for ostomies
 - Colostomy irrigation
 - Ureterostomy

- Enterostomy
- Urinary catheterization and drainage
- Feeding
 - Nastro – gastric
 - Gastrostomy
 - Jejunostomy
- Care of surgical wounds
 - Dressing
 - Suture removal

Paediatric OPD / Immunization room

- Assessment of children
 - Health assessment
 - Developmental assessment
- Immunization
- Health / Nutritional Education

Paediatric Medicine and surgery ICU

- Care of a baby in incubator / warmer
- Care of a child on ventilator
- Endotracheal suction
- Chest physiotherapy
- Administer fluids with infusion pump
- Total parenteral nutrition
- Phototherapy
- Monitoring of babies
- Cardio Pulmonary resuscitation

Assignments:

Give care to assigned paediatric patients

Nursing care Plan – 1

Case study / presentation – 1

Health Talk – 1

The assessment of the skills will be done by assessing performance with rating scale, assess each skill with check list OSCE/OSPE, evaluation of case study / presentation and Health Education session, completion of activity record.

Internship

- To provide comprehensive care to children with medical conditions in Paediatric medicine ward / ICU
- To provide comprehensive care to children with surgical conditions in Paediatric surgery ward / ICU
- To provide intensive care to neonates

The assessment of the skills will be done by assessing clinical performance with rating scale.

MENTAL HEALTH NURSING

Placement: Third year

Duration: Theory – 90 hours

Practical – 270 hours

Internship – 95 hours (2 weeks)

Course Description: This course is designed for developing an understating o f the modern approach to mental health, identification, prevention and nursing management of common mental health problems with special emphasis on therapeutic interventions for individuals, family and community.

The learning objectives are:

- The historic development and current trends in mental health nursing
- The epidemiology of mental health problems
- The National Mental health Act, programmes and mental health policy
- The scope of mental health nursing
- The concept of normal and abnormal behavior
- The classification of mental disorders
- The psycho dynamics of maladaptive behavior
- The etiological factors, psychopathology of mental disorders
- The principles and standards of Mental health Nursing
- The conceptual models of mental health nursing
- The nature, purpose and process of assessment of mental health status
- To identify therapeutic communication techniques
- To know therapeutic relationship
- The therapeutic impasse and its intervention
- The treatment modalities and therapies used in mental disorders and role of the nurse
- The etiology, psycho-pathology, clinical manifestations, diagnostic criteria and management of patients with Schizophrenia and other psychotic disorders
- The etiology, psycho – pathology, clinical manifestations, diagnostic criteria and management of patients with mood disorders, patients with neurotic, stress related and somatization disorders, patients with substance use disorders, patients with personality, sexual and eating disorders, management of childhood and adolescent disorders including mental deficiency, organic brain disorders
- To identify psychiatric emergencies and carry out crisis intervention
- Legal aspects applied in mental health settings and role of the nurse
- The model of preventive psychiatry
- Community mental health services and role of the nurse.

Unit I: Introduction

- Perspectives of Mental Health and Mental Health Nursing: evolution of mental health services, treatments and nursing practices.
- Prevalence and incidence of mental health problems and disorders
- Mental Health Act
- National Mental Health

- National Mental health policy vis a vis National Health Policy
- National Mental Health programme
- Mental health team
- Nature and scope of mental health nursing
- Role and functions of mental health nurse in various settings and factors affecting the level of nursing practice
- Concepts of normal and abnormal behavior

Unit II: Principles and Concepts of Mental Health Nursing

- Definition: mental health nursing and terminology used
- Classification of mental disorders:ICD
- Review of personality development, defense mechanisms
- Maladaptive behavior of individuals and groups: stress, crisis and disasters
- Etiology – bio-psycho-social factors
- Psychopathology of mental disorders: review of structure and function of brain, limbic system and abnormal neuro transmission
- Principles of Mental Health Nursing
- Standards of Mental health Nursing practice
- Conceptual models and the role of nurse
 - Existential Model
 - Psycho – analytical model
 - Interpersonal model

Unit III: Assessment of mental health status

- History taking
- Mental status examination
- Mini mental status examination
- Neurological examination: Review
- Investigations : Related Blood chemistry, EEG, CT &MRI
- Psychological tests

Role and responsibilities of nurse

Unit IV: Therapeutic communication and nurse patient relationship

- Therapeutic communication: Types, techniques, characteristics
- Types of relationship
- Ethics and responsibilities
- Elements of nurse patient contract
- Review of technique of IPR-Johari Window
- Goals, phases, tasks, therapeutic techniques
- Therapeutic impasse and its intervention

Unit V: Treatment modalities and therapies used in mental disorders

- Psycho Pharmacology

- Psychological therapies: Therapeutic community, psycho therapy - individual: psycho – analytical,, cognitive and supportive, Family, Group, Behavioural, Play, Psycho-drama, Music, Dance, Recreational and Light therapy, Relaxation therapies: Yoga meditation, bio feed back
 - Alternative systems of Medicine
 - Occupational therapy
 - Physical Therapy: electro conclusive therapy
 - Geriatric considerations
- Role of nurse in above therapies

Unit VI: Nursing management of patients with Schizophrenia and other psychotic disorders

- Classification : ICD
- Etiology, pscyo – pathology, types, clinical manifestations, diagnosis
- Nursing Assessment – History and Physical and assessment
- Treatment modalities and nursing management of patients with Schizophrenia and other psychotic disorders
- Geriatric considerations
- Follow – up and home care and rehabilitation

Unit VII: Nurse Management of patient with mood disorders

Mood disorders: Bipolar affective disorder, Mania depression and dysthymia etc

- Etiology, pscyo – pathology, types, clinical manifestations, diagnosis
- Nursing Assessment – History and Physical and assessment
- Treatment modalities and nursing management of patients with mood disorders
- Geriatric considerations
- Follow up and home care and rehabilitation

Unit VIII: Nurse management of patient with neurotic, stress related and somatization disorders

- Anxiety disorder, Phobias, Dissociation and Conversion disorder, Obsessive compulsive disorder
- Etiology, pscyo – pathology, types, clinical manifestations, diagnosis
- Nursing Assessment – History and Physical and assessment
- Treatment modalities and nursing management of patients with neurotic, stress related and somatization disorders
- Geriatric considerations
- Follow up and home care and rehabilitation

Unit IX: Nurse Management of patient with substance used disorders

commonly used psychotropic substance: Classification, forms, routes, action, intoxication and withdrawal

- Etiology of dependence: tolerance, psychological and physical dependence, withdrawal syndrome, diagnosis

- Nursing Assessment – History and Physical, mental assessment and drug essay
- Treatment (detoxication, antabuse and narcotic antagonist therapy and harm reduction) nursing management of patients with substance use disorders
- Geriatric considerations
- Follow up and home care and rehabilitation

Unit X: Nursing management of patient with personality, sexual and eating disorders

- Classification of disorders
- Etiology, psycho-pathology, characteristics, diagnosis
- Nursing Assessment – History and Physical, mental assessment
- Treatment modalities and nursing management of patients with personality, sexual and eating disorders.
- Follow-up and home care and rehabilitation

Unit XI: Nursing management of child hood and adolescent disorders including mental deficiency

- Classification
- Etiology, psycho-pathology, characteristics, diagnosis, Nursing Assessment – History and Physical, mental and IQ assessment
- Treatment modalities and nursing management of childhood disorders including mental deficiency
- Follow-up and home care and rehabilitation

Unit XII: Nursing management of organic brain disorders

- Classification: ICD?
- Etiology, psycho-pathology, clinical features, diagnosis and Differential diagnosis (parkinsons and alzheimers)
- Nursing Assessment – History and Physical, mental and neurological assessment
- Treatment modalities and nursing management of organic brain disorders
- Geriatric considerations
- Follow-up and home care and rehabilitation

Unit XIII: Psychiatric emergencies and crisis intervention

- Type of psychiatric emergencies and their management
- Stress and adaption model: stress and stressor, coping, resources and mechanism
- Grief: Theories of grieving process, principles techniques of counseling
- Types of crisis
- Crisis Intervention: Principles, Techniques and Process
- Geriatric considerations

Role and responsibilities of nurse

Unit XIV: Legal issues in Mental Health Nursing

- The Mental Health Act 1987: Act, Sections, Articles and their implications etc.
- Indian Lunacy Act.1912
- Rights of mentally ill clients
- Forensic psychiatry
- Acts related to narcotic and psychotropic substances and illegal substances and illegal drug trafficking
- Admission and discharge procedures

Role and responsibilities of nurse

Unit XV: Community Mental Health Nursing

- Development of Community Mental Health Services:
- National Mental Health Programme
- Institutionalization Versus Deinstitutionalization
- Model of Preventive psychiatry: Levels of Prevention
- Mental Health Services available at the primary, secondary, tertiary levels including rehabilitation and Role of nurse
- Mental Health Agencies: Government and voluntary, National and International
- Mental Health nursing issues for special populations: Children, Adolescence, Women, Elderly, Victims of violence and abuse, handicapped, HIV / AIDS etc.
- The Mental Health Act 1987: Act, Sections, Articles and their implications etc.
- Indian Lunacy Act.1912
- Rights of mentally ill clients
- Forensic psychiatry
- Acts related to narcotic and psychotropic substances and illegal substances and illegal drug trafficking
- Admission and discharge procedures

Role and responsibilities of nurse

The teaching learning activities will be through lecture discussion, demonstration, explanation using charts, review of personality development, clinical practice, case presentation, field visits to mental service agencies.

The internal assessment will be done through short answer objective type, assessment of field visits and developmental study report, assessment of skills with checklist

MENTAL HEALTH NURSING PRACTICAL

Placement: Third year

**Duration: –Practical – 270 hours
Internship – 95 hours (2 weeks)**

The learning objectives are:

- Assess patients with mental health problems
- Observe and assist in therapies
- Counsel and educate patient, and families
- Assessment of children with various mental health problems
- Counsel and educate children, families and significant others
- Assess patients with mental health problems
- To provide nursing care for patients with various mental health problems
- Assist in various therapies
- Counsel and educate patients, families and significant others
- To identify patients with various mental disorders
- To motivate patients for early treatment and follow up
- To assist in follow up clinic
- Counsel and educate patient, family and community.

Areas & Skills

Psychiatric OPD

- History taking
- Assist in Psychometric assessment
- Perform Neurological examination
- Observe and assist in therapies
- Teach patients and family members

Child guidance clinic

- History taking in psychometric assessment
- Observe and assist in various therapies
- Teach family and significant others

In patient ward

- History taking
- perform mental status examination (MSE)
- Assist in Psychometric assessment
- Record therapeutic communication
- Administer medications
- Assist in Electro convulsive therapy (ECT)
- Participate in all therapies
- Prepare patients for Activities of Daily living (ADL)

- Conduct admission and discharge counseling
- Counsel and teach patients and families

Community psychiatry

- Conduct case work
- Identify individuals with mental health problems
- Assist in mental health camps and clinics
- Counsel and teach family members, patients and community.

Assignments:

- History taking and mental status examination – 2
- Health education – 1
- Observation of OPD
- Case work – 1
- Observation report of different therapies – 1
- Giving care to 2 to 3 patients with various mental disorders
- Case study - 1
- Clinical presentation – 1 Process recording – 2
- Maintain drug book
- Case work - 1
- Observation report on field visits

The assessment of the skills will be done by assessing performance with rating scale, assess each skill with check list, evaluation of case study / presentation and Health Education session, completion of activity record, evaluation of the observation report and case study.

Internship

- To provide comprehensive care to patients with mental health in psychiatry ward.

The assessment of the skills will be done by assessing clinical performance with rating scale.

In old regulation Nursing Research and statistics was placed in fourth year. But in the modified regulation it has been placed in third year

NURSING RESEARCH AND STATISTICS

PLACEMENT: Third year

DURATION: Theory – 45 hrs
Practical – 45 hrs

COURSE DESCRIPTION: This course is designed to enable students to acquire understanding of basic concepts of research, research process and statistics. It is further, structured to conduct / participate in need based research bodies in various settings and utilize the research findings to provide quality nursing care. The hours for practical will be utilized for conducting individual / group research project.

The learning objectives of are:

- To know the concept of research, terms, needs and areas of research in nursing
- The steps of research process
- To identify and state the research problem and objectives
- The review related literature
- The research approaches and designs
- To know the sampling process
- The methods of data collection
- To analyze, interpret and summarize the research data
- The use of statistics, scales of measurement and graphical presentation of data
- The measures of central tendency and variability and methods of correlation
- To communicate and utilize the research findings

Unit I : Research and research process

- Introduction and need for nursing research
- Definition of Research and nursing research
- Steps of scientific method
- Characteristic process – overview

Unit II: Research Problem / Question

- ⌚ Identification of problem area
- ⌚ Problem statement
- ⌚ Criteria of a good research problem
- ⌚ Writing objectives
- ⌚ Material management: equipment and supplies

Unit III: Review of Literature

- ⌚ Location
- ⌚ Sources
- ⌚ Online search; CINHALL, COCHRANE etc

- ⌚ Purposes
- ⌚ Method of review

Unit IV: Research and approaches and designs

- ⌚ Historical, survey and experimental
- ⌚ Qualitative and quantitative designs

Unit V: Sampling and data collection

- ⌚ Definition of Population, Sample, Sampling criteria, factors influencing sampling process, types of sampling process, types of sampling techniques
- ⌚ Data – why, what, from whom, when and where to collect.
- ⌚ Data collection methods and instruments:
 - Methods of data collection
 - Questioning, interviewing
 - Observations, record analysis and measurement
 - Types of instruments
 - Validity and Reliability of the Instrument
 - Pilot study
 - Data collection procedure

Unit VI: Analysis of data:

- ⌚ Compilation, Tabulation, classification, summarization, presentation, interpretation of data

Unit VII: introduction to statistics

- ⌚ Definition, use of statistics, scales of measurement
- ⌚ Frequency distribution and graphical presentation of data
- ⌚ Mean, Median and Mode, Standard Deviation
- ⌚ Normal probability and tests of significance
- ⌚ Co-efficient of correlation
- ⌚ Statistical packages and its application

Unit VIII: Communication and utilization of research

- ⌚ Communication of research findings
 - Verbal report
 - Writing research report
 - Writing scientific article / paper
 - Critical review of published research
 - Utilization of research findings

The teaching learning activities will be in the form of Lecture discussions, narrate steps of research process followed from examples of published studies, exercise of writing statement of

problems and objectives, prepare annotated bibliography. to explain types of research approaches used from examples of published and unpublished research studies with rationale, reading assignments on example of data collection tools, Preparation of sample data collection tool, conduct group research project, preparation of sample tables.

The internal assessment will be done through tests consisting of essay type, short answers, oral presentation, and assessment of group research project.

In old regulation the theory and 180 practical hours of Midwifery and Obstetrical Nursing was placed in third year. But in modified syllabus both (theory and 180 practical hours) has been placed in fourth year

MIDWIFERY AND OBSTETRICAL NURSING

Placement: Fourth year

Duration: Theory – 90 hours

Practical – 180 hours

Course Description: This course is designed for the students to appreciate the concepts and principles of midwifery and obstetrical nursing. It helps them to acquire knowledge and skills in rendering nursing care to normal and high risk pregnant woman during antenatal, natal and post natal periods in hospitals and community settings. It also helps to develop skills in managing normal and high risk neonates and participate in family welfare programme.

The learning objectives are:

- To recognize the trends and issues in midwifery and obstetrical nursing
- The anatomy and physiology of female reproductive system
- The diagnosis and management of women during antenatal period
- The physiology and stages of labour
- The management of women during intranatal period
- The physiology of puerperium
- The management of women during post-natal period
- The assessment and management of normal neonate
- The management of women with high risk pregnancy
- The management of abnormal labour and obstetrical emergencies
- Management of post natal complications
- To identify the high risk neonates and their nursing management
- The indication, dosage, action, side effects and nurses responsibilities in the administration of drugs used for mothers
- To appreciate the importance of family welfare programme
- The methods of contraception and role of nurse in family welfare programme.

Unit I : Introduction to midwifery and obstetrical nursing

- Introduction to concepts to midwifery and obstetrical nursing
- Trends in midwifery and obstetrical nursing
 - Historical perspectives and current trends
 - Legal and ethical aspects
 - Pre – conception care and preparing for parenthood
 - Role of nurse in midwifery and obstetrical care
 - National policy and legislation in relation to maternal health and welfare
 - Maternal, morbidity, mortality and fertility rates
 - Perinatal, morbidity and mortality rates

Unit II: Review of anatomy and physiology of female reproductive system and foetal development

- Female pelvis – general description of the bones joints, ligaments, planes of the pelvis diameters of the true pelvis , important landmarks, variations in pelvis shape
- Female organs of reproduction – external genitalia, internal genital organs and their anatomical relations, musculature – blood – supply, nerves, lymphatics, pelvic cellular tissue, pelvic peritoneum
- Physiology of menstrual cycle.
- Human sexuality
- Foetal development
 - Conception
 - Review of fertilization , implantation (embedding of the ovum), development of the embryo and placenta at term – functions, abnormalities, the foetal sac, amniotic fluid, the umbilical cord
 - Foetal circulation, foetal skull, bones, sutures and measurements.
- Review of genetics

Unit III: Assessment and management of pregnancy (ante-natal)

- Normal pregnancy
- Physiological changes during pregnancy
 - Reproductive system
 - Cardiovascular system
 - Respiratory system
 - Urinary system
 - Gastro intestinal system
 - Metabolic changes
 - Skeletal changes
 - Skin changes
 - Endocrine system
 - Psychological changes
 - Discomforts of pregnancy
- Diagnosis of pregnancy
 - Signs
 - Differential diagnosis
 - Confirmatory tests
- Ante-natal care
 - Objectives
 - Assessment
 - History and physical examination
 - Antenatal examination
 - Signs of previous child birth
 - Relationship of foetus to uterus and pelvis: Lie, Attitude, Presentation, Position
 - Per vaginal examination
- Screening and assessment for high risk;
- Risk approach

- History and Physical Examination
- Modalities of diagnosis; Invasive and Non – invasive, ultrasonics, cardiotomography, NST, CZST
- Antenatal preparation
 - Antenatal counseling
 - Antenatal exercises
 - Diet
 - Substance use
 - Education for child-birth
 - Husband and families
 - Preparation for safe –confinement
 - Prevention from radiation
- Psycho-social and cultural aspects of pregnancy
 - Adjustment to pregnancy
 - Unwed mother
 - Single parent
 - Teenage pregnancy
 - Sexual violence
- Adoption

Unit IV: Assessment and management of intra – natal period

- Physiology of labour, mechanism of labour
- Management of labour
 - First stage
 - Signs and symptoms of onset labour; normal and abnormal
 - Duration
 - Preparation of : labour room, Woman
 - Assessment and observation of women in labour; partogram – maternal and foetal monitoring
 - Active management of labour, Induction of labour
 - Pain relief and comfort in labour
 - Second stage
 - Signs and symptoms; normal and abnormal
 - Duration
 - Conduct of delivery: Principles and techniques
 - Episiotomy (only if required)
 - Receiving the new born
 - Neonatal resuscitation; initial steps and subsequent resuscitation
 - Care of umbilical cord
 - Immediate assessment including screening for congenital anomalies
 - Identification
 - Bonding

- Initiate feeding
- Screening and transportation of the neonate
- Third stage
 - Signs and symptoms; normal and abnormal
 - Duration
 - Method of placental expulsion
 - Management ; Principles and techniques
 - Examination of the placenta
 - Examination of the perineum
- Maintaining records and reports
- Fourth stage

Unit V: Assessment and management of women during post natal period

- Normal puerperium; Physiology Duration
- Postnatal assessment and management
- Promoting physical and emotional well – being
- Lactation management
- Immunization
- Family dynamics after child birth
- Family welfare services; methods, counseling
- Follow-up
- Records and reports

Unit VI: Assessment and management of normal neonates

- Normal Neonate;
- Physiological adaptation
- Initial and Daily Assessment
- Essential new born care; Thermal control
- Breast feeding, prevention of infections
- Immunization
- Minor disorders of newborn and its management
- Levels of neonatal care (level , II and III)
- At primary, secondary and tertiary levels
- Maintenance of reports and records

Unit VII: High – risk pregnancy – assessment and management

- Screening and assessment
- Ultrasonics, cardiotomography , NST, CST, non – invasive & invasive
- Newer modalities of diagnosis
- High – risk approach
- Levels of care; primary, secondary and tertiary levels
 - Hyper – emesis gravidarum, bleeding in early pregnancy, abortion, ectopic

- Pregnancy, vesicular mole
- Ante – partum haemorrhage
- Urinary abnormality and displacement
- Diseases complicating pregnancy
 - Medical and surgical conditions
 - Infections, RTI (STD), UTI, HIV, TORCH
 - Gynaecological diseases
 - Pregnancy induced hypertension & diabetes, Toxemia of pregnancy, hydraminos
 - Rh compatibility
 - Mental disorders
- Adolescent pregnancy, Elderly primi and grand multipara
- Multiple pregnancy
- Abnormalities of placenta and cord
- Intra-uterine growth retardation
- Nursing management of mothers with high-risk pregnancy
- Maintenance of records and reports

Unit VIII: Abnormal labour – Assessment and Management

- Disorders in labour
- CPD and contracted pelvis
- Malpositions and malpresentations
- Premature labour, disorders of uterine actions – precipitate labour, prolonged labour
- Complications of third stage: injuries to bith canal
- Obstetrical emergencies and their management
 - Presentation and prolapsed of cord, Vasa praevia, amniotic fluid embolism, rupture of uterus, shoulder dystocia, obstetrical shock
- Obstetrical procedures and operations;
 - Induction of labor, forceps, vaccum, version, caesarean section, destructive operations
- Nursing management of women undergoing Obstetrical operations and procedures

Unit IX: Abnormalities during Postnatal Periods

- Assessment and management of woman with postnatal complications
- Puerperial infections, breast engorgement and infections, UTI, thrombo – Embolic disorders, post-partum haemorrhage, Eclampsia and subinvolution
- Psychological complications:
 - Post partum blues
 - Post partum depression
 - Post partum Psychosis

Unit X: Assessment management of High risk new born

- Admission of neonates in the neonatal intensive care units – neonatal intensive care units – protocols
- Nursing management of
 - Low birth weight babies

- Infections
- Respiratory problems
- Haemolytic disorders
- Birth injuries
- Malformations
- Monitoring of high risk neonates
- Feeding of high risk neonates
- Organization and management of neonatal intensive care units
- Infection control in neonatal intensive care units
- Maintenance of reports and records

Unit XI: Pharmaco-therapeutics and obstetrics

- Indication, dosage, action, contra indication and side effects of drugs
- Effect of drugs on pregnancy, labour and puerperium,
- Nursing responsibilities in the administration of drug in Obstetrics – oxytocins, antihypertensives, diuretics, tocolytic agents, anti – convulsants;
- Analgesics anesthetics in obstetrics
- Effects of maternal medication on foetus and neonate

Unit XII: Family Welfare Programme

- Population trends and problems in India
- Concepts, aims, importance and history of family welfare programme
- National population; dynamics, policy and education
- National family welfare: programme; RCH, ICDS, MCH safe mother hood
- Organization and administration ; at national, state, district, block and village levels
- Methods of contraception; spacing, temporary and permanent, emergency contraception
- Maintenance of vital statistics
- Role of national, international and voluntary organizations
- Role of a nurse in family welfare programme
- Training / Supervision / Collaboration with other functionaries in community like ANMs, LHV, Anganwadi workers, TBAs (Traditional birth attendant – Dai)

The teaching learning activities will be through lecture discussion, explanation using charts and graphs, review with charts and models, case discussion / presentation, health talk, practice session, counseling session, supervised clinical practice.

The internal assessment will be done through short answer objective type , assessment of skills with checklist, assessment of patient management problems.

MIDWIFERY AND OBSTETRICAL NURSING

Placement: Fourth year

Duration: –180 hours
Internship – 240 +180 hours

The learning objectives are:

- Assessment of pregnant women
- Assess woman in labour
- Carry out pre – vaginal examinations
- Conduct normal deliveries
- Perform episiotomy and suture it
- Resuscitate new borns
- Assist with Caesarean Sections, MTP and other surgical procedures
- Provide nursing care to post natal mother and baby
- Counsel and teach mother and family for parent hood
- Provide nursing care to new born at risk
- Rotation from post natal ward

Areas & Skills

Antenatal Clinic / OPD

- Antenatal history taking
- Physical examination
- Recording of weight and B.P
- Hb and Urine testing for sugar and albumin
- Antenatal examination – abdomen and breast
- Immunization
- Assessment of risk status
- Teaching antenatal mothers
- Maintenance of antenatal records

Labour room O.T

- Assessment of Woman in labour
- Prevaginal examinations and interpretation
- Monitoring and caring of woman in labour
- Maintenance of partograph
- Conduct normal delivery
- New born assessment and immediate care
- Resuscitation of new borns
- Assessment of risk status of new born
- Episiotomy and suturing
- Maintenance of labour and birth records
- Arrange for assist with Caesarean
- Arrange for and assist with MTP and other surgical procedures

Post natal ward

- Examination and assessment of mother and Baby

- Identification of deviations
- Care of post natal mother and baby
- Perineal care
- Lactation management
- Breast feeding
- Baby bath
- immunization
- teaching post natal mother
 - Mother craft
 - Post natal care and
 - Exercises
 - Immunization

New born nursery:

- New born assessment
- Admission of neonates
- Feeding of at risk neonates
 - Katori spoon, paladin, tube feeding, total parental nutrition
- Thermal management of neo nates – kangaroo mother care, care of baby in incubator
- Monitoring and care of neo nates
- Administering medications
- Intravenous therapy
- Assisting with exchange transfusion
- Care of baby on ventilator
- Phototherapy
- Infection control protocols in the nursery
- Teaching and counseling of parents
- Maintenance of neo natal records

Family planning clinic:

- Counseling technique
- Insertion of IUD
- Teaching on use of family planning methods
- Arrange for and assist with family planning operations
- Maintenance of records and reports

Assignments:

*Conduct of Antenatal examination-30

Conduct normal deliveries – 20

Prevaginal examinations – 5

- Perform and suture the episiotomies – 5
- Resuscitate new borns – 5
- Assist with caesarean sections- 2
- Witness abnormal deliveries - 5, give care to post natal, IUD insertion
- Assist with MTP and other surgical procedures -1
- Case book recordings

- Observation study
- Counseling
- Stimulation exercise on recording and reporting
- Health talk
- IUD insertion – 5
- Give care to Post natal mothers - 20
- *Essential requirements for registration as midwife
- * Antenatal Examination 30
- Conduct normal deliveries in hospital /
- Home / health centre 20
- * Vaginal examination 5
- * Episiotomy and suturing 5
- * Neonatal resuscitation 5
- * Assist with caesarean section 2
- * Witness / Assist abnormal deliveries 5
- *Post natal cases nursed in hospital /
- Home / health care centre 20
- Insertion of IUD 5

Note: All cases must be certified by teacher on completion of essential requirements

Internship obstetrical nursing
Internship Duration – 5 weeks

Area	Objective	Skills	Assignment	Assessment methods
Labour ward	Provide comprehensive care to mothers and to neonates	Integrated practice	Completion of other essential requirements	Assess clinical performance with rating scale
Neonatal intensive care unit / NICU			Case book recordings	Completion of case book recordings
Antenatal				

The assessment of the skills will be done by assessing performance with rating scale, assess each skill with check list, evaluation of case study / presentation and Health Education session, completion of activity record.

COMMUNITY HEALTH NURSING – II

Placement : Fourth year

Duration : Theory – 90 (110) hours

Practical – 135 hours

Course Description: This course is designed for students to practice community health nursing for the individual, family and groups at both urban and rural settings by using concept and principles of health and community health nursing

The learning objectives are:

- The concepts, scope, principles and historical development of Community Health and Community Health Nursing
- The health plans, policies, various health problems in India.
- The system of delivery of community health services in rural and urban areas
- To list the functions of various levels and their staffing pattern
- The components of health services
- The alternative systems of health promotion and health maintenance
- The chain of referral system
- The community Health Nursing approaches and concepts
- The roles and responsibilities of Community Health Nursing Personnel.

Unit I : Introduction

- Definition, concept and scope of Community Health and Community Health Nursing
- Historical development of
 - Community health
 - Community Health Nursing
 - Pre-independence
 - Post – independence

Unit II: Health planning and policies and problems

- National health planning in India – five Year Plans
- Various committees and commissions on health and family welfare
 - Central council for health and family welfare (CCH and FW)
 - National population policy
- ❖ Health problems in India

Unit III: Delivery of community health services

- Planning, budgeting and material management of Scs, PHC and CHC
- Rural: Organization, staffing and functions of rural health services provided by government at

- Village
- Subcentre
- Primary health centre
- Community health centre / subdivisional
- Hospitals
- District
- State
- Centre
- Urban : Organization, staffing and functions of urban health services provided by government at
 - Slums
 - Dispensaries
 - Maternal and child health centres
 - Special clinics
 - Hospitals
 - Corporation / Municipality Board
 - Subcentre
 - Primary health centre
 - Community health centre / subdivisional
- Components of health services
 - Environmental sanitation
 - Health education
 - Vital statistics
 - M.C.H – antenatal, natal, postnatal, MTP Act, female foeticide act, Child adoption act
 - Family welfare
 - National health programmes
 - School health services
 - Occupational health
 - Defence services
 - Institutional services
- Systems of medicine and health care
 - Allopathy
 - Indian System of Medicine and Homeopathy
 - Alternative health care systems like yoga, meditation, social and spiritual healing NETC.
- Referral System

Unit IV: Community Health Nursing approaches, concepts and roles and responsibilities of nursing personnel

- Approaches
 - Nursing theories and nursing process
 - Epidemiological approach
 - Problem solving approach
 - Evidence based approach

- Empowering people to care for themselves
- Concepts of Primary Health Care:
 - Equitable distribution
 - Community participation
 - Focus on prevention
 - Use of appropriate technology
 - Multi-sectoral approach
- Roles and responsibilities of Community Health Nursing personnel in
 - Family health services
 - Information Education Communication (IEC)
 - Management Information System (MIS): Maintenance of Records and reports
 - Training and supervision of various categories of health workers
 - National Health Programmes
 - Environmental sanitation
 - Maternal, Child Health and Family Welfare
 - Treatment of Minor ailments
 - School health services
 - Occupational Health
 - Organization of clinics, camps, Types, Preparation, planning conduct and evaluation
 - Waste management in the centre, clinics etc.
- Home Visit: Concept, Principles, Process, Techniques: Bag technique home visit
 - Qualities of Community Health Nurse
 - Job Description of Community health nursing personnel

Unit V: Assisting individuals and groups to promote and maintain their health

- Empowerment for self care of individuals, families and groups in -
- A. Assessment of self and family
 - Monitoring growth and development
 - Mile stones
 - Weight measurement
 - Social development
 - Temperature and blood pressure monitoring
 - Menstrual cycle
 - Breast self examination and testicles
 - Warning signs of various diseases
 - Tests: Urine for sugar and albumin, blood sugar
- B. Seek health services for
 - Routine check up
 - Immunization
 - Counseling
 - Diagnosis
 - Treatment
 - Follow up

- C. Maintenance of health records for self and family
- D. Continue medical care and follow up in community for various diseases and disabilities
- E. Carryout therapeutic procedures as prescribed / required for self and family
- F. Waste management
 - Collection and disposable of waste at home and community
- G. Sensitize and handle social issues affecting health and development for self and family
 - Women Empowerment
 - Women and child abuse
 - Abuse of elders
 - Female Foeticide Commercial sex workers
 - Food adulteration
 - Substance abuse
- H. Utilize community resources for self and family
 - Trauma services
 - Old age homes
 - Orphanage
 - Homes for destitute

Unit VI: National health and family welfare programmes and the role of a nurse

- National ARI programme
- Revised National Tuberculosis Control Programme (RNTCP)
- National Anti – Malaria programme
- National Filaria control programme
- National Guinea worm eradication programme
- National Leprosy eradication programme
- National AIDS control programme
- STD control programme
- National programme for control of blindness
- Iodine deficiency disorder programme
- Expanded programme for immunization
- National family Welfare Programme – RCH Programme historical development, organization, administration, research, constraints
- National Water supply and sanitation programme
- Minimum Need Programme
- National Diabetes Control programme
- Polio Eradication: Pulse Polio Programme
- National Cancer Control Programme
- Yaws Eradication Programme
- national Nutritional Anemia Prophylaxis programme
- 20 point programme
- Health schemes

- ESI
- CGHS

- Health Insurance

Unit VII: **Health Agencies**

International – WHO, UNFPA, UNDP, World Bank, FAO, UNICEF, DANIDA, European Commission (EC), Red Cross, USAID, UNESCO, Colombo Plan, ILO, CARE etc.

National – Indian Red Cross, Indian Council for child welfare, Family Planning Association of India (FPAI), Tuberculosis Association of India, Hindu Kusht Nivaran Sangh, Central Social Welfare Board, All India Women 's Conference, Blind Association of India etc.

Unit VIII: **Biodiversity and its conservation ***

- Introduction — Definition: genetic, species and ecosystem diversity.
- Biogeographically classification of-India
- Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values
- Biodiversity at global, National and local levels.
- India as a mega»-diversity nation
- Hot~spots of biodiversity.
- Threats to biodiversity: habitat loss, poaching of wildlife, man—wildlife conflicts
- Endangered and endemic species of India
- Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity

Unit IX: **Human Population and the Environment ***

- Population growth, variation among nations
- Population explosion — Family Welfare “Programme
- Environment and human health
- Human Rights
- Value Education
- HIV/AIDS
- Women and Child Welfare.
- Role of information Technology in Environment and human health
- Case studies

The teaching learning activities will be in the form of Lecture discussion, demonstration, practice session, panel discussion, group project, participation in camps, Individual / group / family / community health education, participation in national health programme, field visits etc.

The internal assessment will be done through tests consisting of essay type, short answer question

MANAGEMENT OF NURSING SERVICES AND EDUCATION

PLACEMENT: Fourth year

DURATION: Theory - 90 hours

COURSE DESCRIPTION: This course is designed to enable students to acquire understanding of management of clinical and community health nursing services, nursing educational programmes. This is also designed to enable students to acquire the understanding of the professional responsibilities, prospects and contribution to the growth of the profession.

The learning objectives of are:

- To know the principles and functions of management
- The elements and process of management
- The management of nursing services in the hospital and community
- The concepts, theories and techniques of organizational behavior and human relations
- Participate in planning and organizing in service education program
- The management of Nursing Educational institutions
- The ethical and legal responsibilities of a professional nurse
- The nursing practice standards
- The various opportunities

Unit I : Introduction to management in nursing

- Definition, concepts and theories
- Functions of management
- Principles of Management
- Role of Nurse as a manager

Unit II: Management process

- Planning; mission, philosophy, objective, operational plan
- Staffing: philosophy, staffing study, norms, activities, patient classification systems, scheduling
- Human resource management; recruiting, selecting, deployment, retaining, promoting, super annuation etc
- Budgeting: concept, principles, types, cost benefit analysis, audit
- Material management: equipment and supplies
- Directing process (leading)
- Controlling : Quality management
- Program Evaluation Review Technique (PERT), Bench marking, Activity Plan (Gantt Chart)

Unit III: Management of nursing services in the hospital and community

Planning

- Hospital and patient care units including ward management
- Emergency and disaster management

- ⌚ Human resource management:
 - Recruiting, selecting, deployment, retaining, promoting, super annuation etc
 - Categories of nursing personnel including job description of all levels
 - Patients/population assignment and Nursing care responsibilities
 - Staff development and welfare
- ⌚ Budgeting: Proposal, projecting requirement for staff, equipment and supplies for
 - Hospital and patient care units
 - Emergency and disaster management
- ⌚ Material Management; procurement, inventory control, auditing and maintenance in
 - Hospital and patient care units
 - Emergency and disaster management
- ⌚ Directing and leading; delegation, participatory management
 - Assignments, rotation, delegations
 - Supervision and guidance
 - Implement Standards, policies, procedures and practices
 - Staff development and welfare
 - Maintenance of discipline
- ⌚ Controlling / Evaluation:
 - Nursing protocols, Manuals
 - Quality Assurance Model, documentation –
 - Records and reports
- ⌚ Organizational behavior and human relations
 - Concepts and theories of organizational behaviours
 - Review of channels of communication
 - Leadership styles
 - Review of Motivation;
 - Quality Assurance Model, documentation –
 - Records and reports, performance appraisal

Unit IV: **Organizational behavior and human relations**

- ⌚ Concepts and theories of organizational behaviours
- ⌚ Reviews of Channels of communication
- ⌚ Leadership styles
- ⌚ Review of motivation; concepts and theories
- ⌚ Group dynamics
- ⌚ Techniques of ;

- Communication and
- Interpersonal relationships
- Human relations
- ⌚ Public relations in context of nursing
- ⌚ Relations with professional associations and employee unions and collective bargaining

Unit V: **In service education**

- ⌚ Nature and scope of in service education program.
- ⌚ Organization of in service education
- ⌚ Principles of adult learning
- ⌚ Planning for in –service education program, techniques, methods and evaluation of staff education program
- ⌚ Preparation of report

Unit VI: **Management of nursing education institutions**

- ⌚ Establishment of Nursing educational institution – INC norms and guidelines
- ⌚ Co-ordination with –
 - Regulatory bodies
 - Accreditation
 - Affiliation
 - Philosophy / objectives
 - Organization
 - Structure
 - Committees
 - Physical facilities
 - College / school
 - Hostel
 - Students
 - Selection
 - Admission
 - Guidance and counseling
 - Maintaining discipline
 - Faculty and staff
 - Selection
 - Recruitment
 - Job description
 - Placement
 - Performance appraisal
 - Development and welfare
- ⌚ Budgeting
- ⌚ Equipment and supplies: audio visual equipments, laboratory equipment, books, journals etc
- ⌚ Curriculum; Planning, implementation and evaluation
- ⌚ Clinical facilities transport facilities
- ⌚ Institutional Records and reports – administrative, faculty, staff and students

Unit VII: Nursing as a Profession

- ⌚ Nursing as a profession
 - Philosophy; nursing practice
 - Aims and objectives
 - Characteristics of a professional nurse
 - Regulatory bodies; INC, SNC Acts:- constitution, functions
 - Current trends and issues in Nursing
- ⌚ Professional ethics
 - Code of ethics: INC, ICN
 - Code of professional conduct; INC, ICN
- ⌚ Practice standards for nursing: INC
- ⌚ Consumer protection Act
- ⌚ Legal aspects in Nursing
 - Legal terms related to practice; registration and licensing
 - Laws related to nursing practice; Breach and penalties
 - Malpractice and negligence

Unit VIII: Professional Advancement:

- ⌚ Continuing education
- ⌚ Career opportunities collective bargaining
- ⌚ Membership with professional organizations; National and International
- ⌚ Participation in research activities
- ⌚ Publications; Journals, newspapers etc.

The teaching learning activities will be in the form of Lecture discussions, case discussion, panel discussion, role plays, and critical incidents. Visit to INC, SNRCs, review / Presentation of published articles, group exercises, plan and conduct of educational session

The internal assessment will be done through tests consisting of essay type, short answers, and assessment of problems solving, assessment of critical incidents group work on maintenance of bulletin board, performance evaluation by ward sister with rating scale.

LIST OF TEXT BOOK FOR I YEAR B.Sc (N) STUDENTS

S. NO	SUBJECT	TITLE	AUTHORS NAME
1	Nursing foundations	Fundamentals of nursing	Potter & Perry
2	Nursing Practice	Principles and Practice of Nursing Vol I & II	Sister Nancy

3	Anatomy	Anatomy & Physiology for Nurses	Asha Lata
4	Physiology	Anatomy & Physiology for Nurses	A. K. Jain
5	Computer Science	M S Office	
6	First aid	First Aid Management	St. Johns Ambulance
7	English	Learners English Dictionary	Oxford
		High School English Grammar	Wren & Martin
8	Micro biology	Microbiology for Nurses	Ichubujani
9	Nutrition	Nutrition and Dietetics	Indirani
10	Biochemistry	Essentials of biochemistry	Satyanarayana
11	Psychology	Psychology for Nurses	S.K.Mangal

LIST OF TEXT BOOK FOR II YEAR B.Sc (N) STUDENTS

S. NO	SUBJECT	TITLE	AUTHORS NAME
1	Medical Surgical Nursing	Medical Surgical Nursing	Brunner and Suddarth
2	Community Health Nursing	Text book of Social & Preventive Medicine	K.Park
3	Communication & Education	Learning & Teaching Nursing	Sathya Narayanan
4	Pathology	Rapid Review Pathology	Edward.F.Goljian
5	Genetics	Human Genetics in Nursing	Suresh Kumar Sharma

6	Pharmacology	Pharmacology for Nurses	Dbinav
7	Sociology	Text book of Sociology	Vidhyabhushan

LIST OF TEXT BOOK FOR III YEAR B.Sc (N) STUDENTS

S.No	Subject	Book Title	Author
1	Nursing Research & Statistics	Essentials of Nursing Research–	Denise F.Polit, Cheryl
2	Medical and Surgical Nursing	Indian Drug Review	-
3	Mental Health Nursing	Psychiatric Nursing	Dr. Lalitha
4	Child Health Nursing	Essentials of Paediatric Nursing	Wong

LIST OF TEXT BOOK FOR IV YEAR B.Sc. (N) STUDENTS

S.No	Subject	Book Title	Author
1	Management of Nursing Services & Educations	Nursing Administration	Dr.B.T.Basavanthappa
2	Midwifery	A comprehensive Text book of Midwifery	Annamma Jacob
3	Midwifery	Midwifery Dictionary	-