Maharaja Ranjit Singh Punjab Technical University Bathinda-151001



FACULTY OF PHARMACY

SYLLABUS

FOR

DIPLOMA IN NURSING ASSISTANT

(2 YEARS PROGRAMME)

2023 BATCH ONWARDS

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SCHEME

1 st Semester		Contact Hrs.			Marks			Cuadita
Subject Code	Subject	L	T	P	Int.	Ext	Total	Credits
DNRAS1-101	Fundamental of Nursing (including first aid, emergency Nursing)	3	1	0	40	60	100	4
DNRAS1-102	Anatomy & Physiology	3	1	0	40	60	100	4
DNRAS1-103	Nutrition & Bio- Chemistry	3	1	0	40	60	100	4
DNRAS1-104	Nutrition & Biochemistry - Lab.	0	0	4	60	40	100	2
DNRAS1-105	Anatomy & Physiology -Lab	0	0	4	60	40	100	2
DNRAS1-106	Child Health Nursing	3	1	0	40	60	100	4
	Total	12	4	8	280	320	600	20

2 nd Semester		Contact Hrs.			Marks			Credits	
Subject Code	Subject	L	Т	P	Int.	Ext	Total	Credits	
DNRAS1-201	Psychology	3	1	0	40	60	100	4	
DNRAS1-202	Sociology	3	1	0	40	60	100	4	
DNRAS1-203	Community Health Nursing	3	1	0	40	60	100	4	
DNRAS1-204	Midwifery Obstetrical Nursing	3	1	0	40	60	100	4	
DNRAS1-205	Community Health Nursing - Lab	0	0	4	60	40	100	2	
DNRAS1-206	Midwifery Obstetrical Nursing- Lab	0	0	4	60	40	100	2	
	Total	12	4	8	280	320	600	20	

3 rd Semester		Contact Hrs.			Marks			Cuadita
Subject Code	Subject	L	Т	P	Int.	Ext	Total	Credits
DNRAS1-301	Medical Surgical Nursing	3	1	0	40	60	100	4
DNRAS1-302	Operation Theater Techniques	3	1	0	40	60	100	4
DNRAS1-303	Mental Health Nursing	3	1	0	40	60	100	4
DNRAS1-304	Management of Nursing Services & Education	3	1	0	40	60	100	4
DNRAS1-305	Medical Surgical Nursing - Lab	0	0	4	60	40	100	2
DNRAS1-306	Operation Theater Techniques - Lab	0	0	4	60	40	100	2
Total 12 4 8 280 320 60		600	20					

4 th Semester		Contact Hrs.			Marks			C 14
Subject Code	Subject	L	T	P	Int.	Ext	Total	Credits
DNRAS1-401	Hospital Training	0	0	40	80	120	200	20
Total		0	0	40	80	120	200	20

Overall Marks / Credits

Semester	Marks	Credits
1 st	600	20
2 nd	600	20
3 rd	600	20
4 th	200	20
Total	2000	80

FIRST SEMESTER

FUNDAMENTAL OF NURSING

Subject Code: DNRAS1-101 L T P C Duration: 60 Hrs.

3 1 0 4

Course Outcomes:

• Demonstrate knowledge of general overall physiological principles associated with metabolic processes.

- Students will be able to learn the terminology of the subject and basic knowledge of cells.
- Students will able to understand the basic of tissues, blood and to understand anatomy and physiology of human body.
- Students will able to understand the basics of musculoskeletal system; cardiovascular system; cardiovascular system; aerobic and anaerobic program design.

UNIT-I (15 Hrs.)

Introduction to Nursing

Nursing: Definition, meaning, Nature, scope, principles and History of nursing.

Nurse: Definition and meaning, preparation of a nurse qualities personal, professional.

Ethics in nursing, Role and responsibilities of a nurse.

Health care agencies: Hospital and community, Types of Hospitals and their functions.

Holistic approach to nursing, Comprehensive nursing care.

UNIT-II (15 Hrs.)

Introduction to the sick and well

Bed and Bed Making

Maintenance of therapeutic environment

Psycho social Environment

Nursing Process and Nursing Care Plan

Recording and Reporting

Discharging a patient

UNIT-III (15 Hrs.)

Basic Nursing Care and Needs of the Patient

Hygienic Needs and physical needs

Elimination needs

Safety needs

Activity and Exercises

Physical Comforts

Moving, shifting and lifting of patient

UNIT-IV (15 Hrs.)

Therapeutic Nursing Care and Procedures Asepsis

Hand washing, hand scrubbing, use of mask, gown, gloves.

Disinfection techniques, sterilization techniques.

Autoclaving, boiling, flaming, ultra violet rays.

Introduction to Pharmacology

Concept of pharmacology.

Classification of drugs.

Administration of drugs.

General action of drugs.

Nursing implications in administration of drugs

Introduction to First Aid

Importance of first aid and rules of first aid.

Concept of emergency.

First Aid in Emergency situations

Fire, burns, fractures, accidents, poisoning, drowning, hemorrhages, insect bites, foreign bodies.

Transportation of the injured.

Bandaging and splinting.

- 1. Lippincott Manual of Nursing Practice.
- 2. Fundamentals of Nursing (Ninth Edition)
- 3. Kozier and Erb's Fundamentals of Nursing (Tenth Edition)
- 4. Fundamentals of Nursing: The Art and Science of Nursing Care (Seventh Edition)

ANATOMY & PHYSIOLOGY

Subject Code: DNRAS1-102 L T P C Duration: 60 Hrs.

3 1 0 4

Course Outcomes:

- Apply concepts, knowledge, and correct terminology to describe anatomy and physiology related to the integumentary, muscular, skeletal, and nervous systems.
- Critically evaluate clinical and physiological data from direct observation and documented research.
- The Course is designed to enable students to acquire knowledge of the normal structure of various human body systems.
- The students will able to understand the alterations in anatomical structures in disease and practice of nursing.

UNIT-I (15 Hrs.)

Introduction to anatomical terms, Organization of body cells, tissues, organs, systems, membranes and glands, Skeletal system:-

- Bones: types, structure, function
- Axial skeleton
- Appendicular skeleton
- Joints: classification, structure and function.

UNIT-II (15 Hrs.)

Muscular system

- Type, structure and functions.
- Position and action of chief muscles of the body.

Cardio Vascular system

- Blood: composition clotting and blood group, cross matching. Blood products and their use.
- Heart: position, structure, conduction system, Function and cardiac cycle.
- Blood Vessels: Structural differences and position of chief vessels
- Circulation of Blood: Systematic, pulmonary and portal circulation
- Blood pressure and pulse
- Lymphatic system: Lymph vessels, glands, ducts and lymph circulation, lymph tissues in the body, spleen.

UNIT-III (15 Hrs.)

Respiratory System

- Structure and functions of respiratory organs Physiology of respiration.
- Characteristics of normal respiration and its deviations.

Digestive system

- Structure and function of organs of digestive and accessory organs.
- Process of digestion and absorption.
- Metabolism: meaning and metabolism of food constituents.

Excretory system

- Structure and functions of organs of urinary system
- Structure and functions of the skin
- Regulation of body temperature.
- Fluid and electrolyte balance.

UNIT-IV (15 Hrs.)

Nervous System

Type, structure and functions of neuron.

- Central Nervous System: Structure and functions.
- Autonomic Nervous System: Structure and functions.

Endocrine System

- Structure and functions of pituitary, pancreas, thyroid parathyroid, thymus and supra renal glands.

Sense Organs

- Structure and functions of eye, ear, nose and tongue.
- Physiology of vision, hearing and equilibrium.

Reproductive System

- Structure and functions of reproductive and accessory organs.
- Process of reproduction, menstrual cycle and menopause
- Reproductive health
- Structure and functions of male organ reproductive system.

- 1. Singh (I), Anatomy & Physiology for Nurses, JP Brothers Publications, 2005.
- 2. Kathleen (JW), Ross & Wilson Anatomy and Physiology in Health and Illness, Churchil Livingston Publication, Philadelphia, 8th Edition, 1999.
- 3. Tortora, Principles of Anatomy & Physiology, John Wiley & Sons, New York, 8th Edition, 2003.

NUTRITION & BIO-CHEMISTRY

Subject Code: DNRAS1-103 LTPC Duration: 60 Hrs.

3 1 0 4

Course Outcomes:

• Learn and understand the basic terms related to nutrition.

- The course is designed to assist the students to acquire knowledge of nutrition for maintenance of optimum health at different stages of life.
- The course is designed to assist the students to acquire knowledge about its application for practice of nursing.

UNIT-I (15 Hrs.)

Introduction

- Nutrition
- History
- Role of nutrition in maintaining health
- Nutritional problem 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 (15 Hrs.)

Classification by chemical composition and sources -

Carbohydrates.

- Proteins
- Fats
- Minerals
- Vitamins
- Water

Classification by predominant functions-

- Body building food
- Energy giving food
- Protective food

Classification by nutritive value -

- Cereals and millets.
- Pulses (Legumes).
- Vegetables.
- Nuts and oil seeds.
- Fruits
- Animal food.

UNIT-III (15 Hrs.)

Normal dietary requirements and deficiency diseases of each of the constituents of food

- The Calorie
- Nutritive value of food items and their measures used.
- Balanced diet.
- Method of calculating normal food requirements, influence of age, sex and activity.
- Factors affecting selection and planning of meals.
- Budgeting for food.
- Low-cost menu.
- Diseases caused by deficiency of protein, fat, carbohydrates, minerals and vitamins.

Preparation, preservation and storage of food

- Principles of cooking.
- Methods of food preparation and their effects on food and food constituents, advantages and limitation of each.
- Household methods of preserving and storing food.
- Commercially prepared food and its adulteration.
- Precautions in selection, preparation and storage of food.

UNIT-IV (15 Hrs.)

Introduction to Diet Therapy

- Methods of modifying diet in relation to calorie value, by increasing or decreasing of constituents.
- Diet and the patient
- Environmental, psychological and cultural factors in acceptance of diet by the patient.
- Serving of food.
- Feeding of helpless patients.
- Opportunities for teaching.

Community Nutrition

- Concept of community nutrition.
- Nutritional needs for special groups: infants, children, pregnant women, lactating mothers, old people etc.
- Nutrition education: needs and methods.
- Substitutes for non-vegetarian food.
- Methods of improving an ill-balanced diet.
- Food hygiene and laws related to food.

- 1. Joshi (YK), Basics of Clinical Nutrition, Jaypee, Chennai, 2nd Edition, 2008.
- 2. Mahan (LK), Krause's Food, Nutrition, Diet & Therapy, Elsevier, 13th Edition, 2007.
- 3. Sri Lakshmi (B), Dietetics, New Age Int (P) Ltd., Publishers, Chennai, 5th Edition, 2007.
- 4. Vasudevan (DM), Text Book of Biochemistry, J.P.Brothers Publication New Delhi, 3rd Edition, 2001.
- 5. Lehninger, Principles of Biochemistry, Worth Publishers, New York, 3rd Edition, 2002.
- 6. Striver (L), (1988). Biochemistry, Freeman & Company, New York, 3rd Edition, 1988.

NUTRITION AND BIOCHEMISTRY (PRACTICAL)

Subject Code: DNRAS1-104 L T P C Duration: 60 Hrs.

0 0 4 2

Course objectives:

- Biochemistry deals with complete understanding of the molecular levels of the chemical process associated with living cells.
- The scope of the subject is providing biochemical facts.
- The students will able to understand principles to understand metabolism of nutrient molecules in physiological and pathological conditions.
- It is also emphasizing on genetic organization of mammalian genome and hetero & autocatalytic functions of DNA.

Course Outcomes:

- Understand the catalytic role of enzymes, importance of enzyme inhibitors design of new drugs, therapeutic and diagnostic applications of enzymes.
- Understand the metabolism of nutrient molecules in physiological and pathological conditions.
- Understand the genetic organization of mammalian genome and functions of DNA.

PRACTICALS

- Demonstration of various parts of body.
- Blood pressure estimation
- Demonstration of various bones and joints.
- To study circulatory system from charts and transverse section of veins.
- Examination of blood film from various blood cells.
- Demonstration of cell and tissues of body.

- 1. Joshi (YK), Basics of Clinical Nutrition, Jaypee, Chennai, 2nd Edition, 2008.
- 2. Mahan (LK), Krause's Food, Nutrition, Diet & Therapy, Elsevier, 13th Edition, 2007.
- 3. Sri Lakshmi (B), Dietetics, New Age Int (P) Ltd., Publishers, Chennai, 5th Edition, 2007.
- 4. Vasudevan (DM), Text Book of Biochemistry, J.P.Brothers Publication New Delhi, 3rd Edition, 2001

ANATOMY AND PHYSIOLOGY LAB

Subject Code: DNRAS1-105 L T P C Duration: 60 Hrs.

0 0 4 2

Course Outcomes:

- The course is a strenuous survey of human anatomy that parallels anatomical characteristics of other animals.
- The course focuses on anatomical terminology.
- The course will help the students to understand the anatomical identification of human body system.
- The course will help the students to understand the physiological processes of human body systems.

PRACTICALS

- Demonstration of parts of Digestive system.
- Demonstration of various parts of body.
- Blood pressure estimation.
- Demonstration of various bones and joints.
- To study circulatory system from charts and transverse section of veins.
- Examination of blood film from various blood cells
- Demonstration of cell and tissues of body
- To study circulatory system from charts and transverse section (TS) of artery and veins

- 1. Singh (I), Anatomy & Physiology for Nurses, JP Brothers Publications, 2005.
- 2. (JW), Ross & Wilson Anatomy and Physiology in Health and Illness, Churchil Livingston Publication, Philadelphia, 8th Edition, 1999.
- 3. Tortora, Principles of Anatomy & Physiology, John Wiley & Sons, New York, 8th Edition, 2003.

CHILD HEALTH NURSING

Subject Code: DNRAS1-106 L T P C Duration: 60 Hrs.

3 1 0 4

Course Outcomes:

This course is designed for developing an understanding of the modern approach to

- Child- care,
- Identification of health-related issues of neonates and children
- Prevention and treatment of health problems of neonates and children
- Nursing management of common health problems of neonates and children.

UNIT-I (15 Hrs.)

Introduction Modern concepts of childcare:

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, Difference between adult and child, Hospital environment for a sick child, Impact of hospitalization on child and family, child health nurse in caring for a hospitalized child.

UNIT-II (15 Hrs.)

• 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 development and parental guidance, Nutritional needs of children &infants: Breast feeding, exclusive breast feeding supplementary /artificial feeding and weaning, Baby friendly hospital concept, Value of play and selection of play materials Preventive immunization programme and cold chain, Preventive Peadiatrics Care of under-five & under five clinics /well baby clinics.

UNIT-III (15 Hrs.)

Nursing care of aneonate:

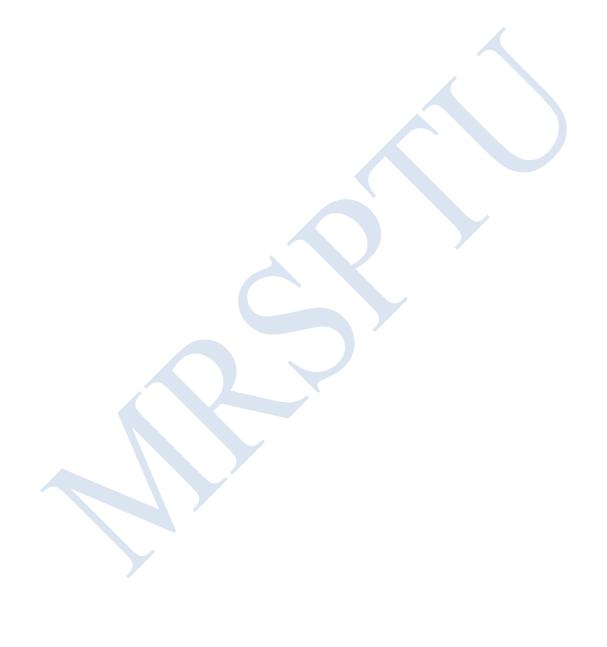
Nursing care of a normal newborn /essential newborn care, Neonatal resuscitation, Nursing management of a low birth baby, Kangaroo mother care Nursing management of common neonatal disorders Organization of neonatal unit. Identification of common congenital malformations. Integrated management of neonatal and childhood illnesses (IMNCI).

UNIT-IV (15 Hrs.)

Nursing management in common childhood diseases:

Nutritional deficiency disorders, Respiratory disorders and infections Gastro intestinal infections, infestations and congenital disorders, Cardiovascular problems: congenital defects and Rheumatic fever, Rheumatic heart disease, Genitourinary disorders: Acute glomerulo nephritis, Nephrotic syndrome, Wilms tumor, infections and congenital disorders. Neurological infections and disorders, convulsions, Epilepsy, meningitis hydrocephalus, Spina bifida. Hematological disorders: Anemia's, Thalassemia, ITP Leukemia, Hemophilia. Endocrine disorders: Juvenile diabetes mellitus, Orthopedic disorders: Clubfoot, Hip dislocation Fracture, Management of behavioral &social problems in children.

- 1. Whaley & Wongs, Nursing Care of Infants & Children, Mosby, Philadelphia.
- 2. Marlow, Textbook of Paediatric Nursing, Harecourt (India) Ltd.
- 3. Nelson, Textbook of Paediatrics, Harecourt India private Ltd.
- 4. Parthasarathy, IAP Textbook of Paediatrics, Jaypee Brothers Medical Publishers, New Delhi.
- 5. Hockenberry, Wong's Maternal Child Nursing Care, Mosby.



SECOND SEMESTER

PSYCHOLOGY

Subject Code: DNRAS1-201 L T P C Duration:60 (Hrs.)

3 1 0 4

Course Objectives:

• This course is designed to assist the students to knowledge of fundaments 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.

Course Outcomes:

- Understand how psychology was developed and became the field of science as we know it now.
- Understand basic psychological processes like sensation & perception, states of consciousness and learning.
- Students will be able to know how complex is human mind and each individual is unique.

UNIT-I (15 Hrs.)

Introduction: History and origin of science of Psychology, Definitions and scope of Psychology, Relevance to Nursing, Methods of Psychology.

Biology of behavior: Body mind relationship – Modulation process in Health and illness.

Genetics and behavior: Heredity and environment.

Brain and Behavior: Nervous system, Neurons and synapse, Association Cortex, Rt and Lt Hemispheres, Psychology of Sensations, Muscular and glandular controls of behavior, Nature of behavior of an organism / integrated responses.

UNIT-II (15 Hrs.)

Cognitive Processes: Attention: Types, determinants, Duration, and 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 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-III (15 Hrs.)

Motivation and Emotional Processes: Motivation: Meaning, Concepts, Types, Theories, Motives and behavior, Conflict and frustration, conflict resolution.

Emotions & Stress: Emotion: Definition, components, Changes in emotions, theories, emotional adjustments, emotions in health and illness. **Stress:** Stressor, cycle, effect, adaptation & Coping.

Attitude: Meaning, nature, development, factors affecting. Behavior and attitudes. Attitudinal

Change Psychometric assessments of emotions and attitudes. Alterations in emotions Applications.

Personality: Definitions, topography, factors affecting personality, types, theories.

Psychometric assessments of personality. Alterations in personality Applications.

UNIT-IV (15 Hrs.)

Developmental Psychology: Psychology of people at different ages from infancy to old age. Psychology of vulnerable individuals — Challenged, women, sick, etc. Psychology of groups. **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.

Psychological assessment & tests: Types, development, Characteristics, Principles, Uses, Interpretations, and role of nurse in psychological assessment.

- 1. Morgon (CT), Introduction to Psychology, Tata McGraw Hill, New Delhi, 20th edition, 2003.
- 2. Atkinson (RL), Hilgard's Introduction to psychology, Harcourt college publishers, Philadelphia, 13th edition, 2000.
- 3. Shelley, Taylor's Health Psychology, Tata McGraw hill publishing co. Ltd, Sidney, 6th Edition 2006.
- 4. Santrock (JW), Educational Psychology, Tata McGraw Hill Pub. Co. Ltd., Sidney 2006.
- 5. Fernald (L.D) Introduction to Psychology A.I.T.B.S. Pub. New Delhi 2006.
- 6. Mangal (SK), Advanced Educational Psychology, Pentice Hall of India, New Delhi, 2nd Edition, 2006.
- 7. Gross (R), Psychology for Nurses and Allied Health Professionals, Hodder Arnold, London, 2007.

	SOCIOLOGY	
Subject Code: DNRAS1-202	LTPC	Duration:60 (Hrs.)
	3 1 0 4	

Course Objectives:

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

Course Outcomes:

- Articulate a sociological perspective.
- Apply sociological theories to understand social phenomena.
- Critically evaluate explanations of human behaviour and social phenomena.
- Apply scientific principles to understand the social world.
- Evaluate the quality of social scientific methods and data.

UNIT-I (15 Hrs.)

Introduction: Definition of Sociology, Nature and Scope of the Importance and application, discipline of sociology in Nursing.

Individual & Society: Society and Community, Nature of Society, Difference between society and community, Process of socialization and individualization, Personal disorganization

Culture: Nature of culture, Evolution of culture, Diversity and uniformity of Culture, Culture and socialization, Transcultural society, Influence on health and disease.

UNIT-II (15 Hrs.)

Biodiversity and its conservation: Introduction Definition: Genetics, species and ecosystem diversity, Bio geographical, classification of India Value of Biodiversity: Consumptive use, Productive use, Social, ethical, aesthetic and option values, Bio diversity at global, national and local levels. India has a mega—diversity nation. Hot-spots of biodiversity, Threats to bio-diversity: habitat loss, poaching of wild life, man, wild life conflicts, Endangered and endemic species of India. **Social groups and processes:** The meaning and classification of groups, Primary & Secondary Group, In-group V/s. Outgroup, Class Tribe, Caste, Economic, Political, Religious groups, Mob, Crowd, Assimilation & Isolation Social Issues.

UNIT-III (15 Hrs.)

Social Issues and environment: From unsustainable to sustainable development, Urban problems and related to energy, Water conservation, Rain water harvesting.

Resettlement and rehabilitation of people: its problems and concern.

Environmental ethics: Issues and possible solutions, climate change, Global warming, acid rain, ocean layer depletion, Nuclear accident and Holocaust waste and reclamation.

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: health status, Family welfare programmes.

Forms and functions of marriage, Marriage and family problems in India Family.

UNIT-IV (15 Hrs.)

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, **Social organization and social system:** Social organization: elements, types, Voluntary associations, social system: Definition and Types of social system.

Social Control: Nature and process of social control, Political, Legal, Religious.

Social Problems: Social disorganization, Control & planning: Poverty, housing, illiteracy, food supplies, prostitution, rights of women & children.

Vulnerable groups: Elderly, handicapped, minority groups and other marginalized groups, child labour, child abuse, delinquency and crime, substance abuse, HIV/ AIDS – Value Education, Social Welfare programmes in India.

- 1. Bhushan (V), Introduction to Sociology, Kitab Mahan, 2002.
- 2. Madan (GR), Indian Social Problems, Allied Publishers, Chennai.
- 3. Mehta (SA), Study of Rural Sociology in India, Chand & Co.
- 4. Ogbern (F), Handbook of Sociology, Eurasoa Publishing, New Delhi.
- 5. Majmudar (DN), An Introduction to Social Anthropology, Asia Publishing House, Bombay.
- 6. Indrani (TK), Textbook of Sociology for Nurses, Jaypee Brothers, New Delhi, 2006.

COMMUNITY HEALTH NURSING

Subject Code: DNRAS1-203 L T P C Duration:60 (Hrs.)

3 1 0 4

Course Objectives:

• This course is designed for students to appreciate the principles of promotion and maintenance of Health.

Course Outcomes:

- To promote health and efficiency
- Prevention and control of diseases and disabilities
- Need-based health care to prolong the life

UNIT-I (15 Hrs.)

Introduction: Community health Nursing, Definition, concepts and dimensions of health, Promotion of health, Maintenance of health.

Determinants of health: Eugenics, Environmental studies: - Definition, Scope and Importance – Need for public services. Environment and Environmental Pollution:

Definition, Causes, Effects and control measure of Physical, Air, Light, Soil, Marine, Thermal, Nuclear pollution, Ventilation, Water (Water resources: Use and Over utilization of surface and ground water, floods, drought, conflicts over water, Dams – Benefits and problems) - Housing, Sanitation, Noise, Climatic change, Heat waves and its Impact on health.

UNIT-II (15 Hrs.)

Solid waste management: -Causes, effects and control measures of Urban and Industrial waste - Disposal of waste disposal of dead bodies.

Communication: Infrastructure facilities and linkages-Forestation, Use and over exploitation, Deforestation, case studies, timber extraction, mining, dams and their effects on forests and tribal people. Mineral Resources Use and exploitation, Environmental effects of extracting and using mineral resources, case studies.

Acts regulating the environment: National Pollution Control Board including Acts on Air and Water. Role of individual in prevention of pollution, pollution case studies.

Bacterial and viral: Agents, host, carries and immunity. -Arthropods and Rodent Food hygiene: Production preservation, Purchase, preparation, consumption, World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer – pesticides problems, water logging, salinity, case studies. Acts regulating food hygiene-Prevention of food. Adulteration Act, drugs and cosmetics Act, Wild life protection Act, Forest conservation Act, Issues involved in enforcement of environmental legislation and public awareness.

UNIT-III (15 Hrs.)

Socio – Cultural: Customs – taboos, Marriage System, Family Structure.

Status of Special groups: females, Children, elderly, challenged groups and sick persons, Lifestyle, Hygiene, Physical activity, Recreation and sleep, Sexual Life, Spiritual life philosophy, Self reliance Dietary Pattern, Education Occupation. **Financial Management**: Income, Budget, Purchasing Power, Security.

Forest resources: Use and overexploitation, Deforestation, Case studies

Timber extraction, Mining, Dams and their effects on forest and tribal people.

Energy Resources: Growing energy needs Renewable and Non-renewable energy resources, use of alternate energy sources, 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 life styles.

UNIT-IV (15 Hrs.)

Ecosystem: Concept of an ecosystem, Structure & Function of an Ecosystem producers, consumers and decomposers. Energy flow in the ecosystem, Ecological succession, Food chains, food webs and ecological pyramids Introduction, types, characteristics, structure and functions of the following ecosystems:

Forest ecosystem, Grass land ecosystem, desert ecosystem, aquatic ecosystem (ponds, streams, lakes, river, ocean, estuaries), Disaster Management: Floods, Earth quake, cyclone and Landslides. **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, Descriptive Analytical: Epidemic investigation of an outbreak, Experimental.

Demography: Definition, Concepts and Scope. Methods of collection, analysis and interpretation of demographic data. Demographic rates and ratios.

- 1. Park (JE), Textbook of Preventive and Social Medicine, Bhanarsida Bhanot Publishers, Jabalpur, 19th Edition, 2007
- 2. Stanhope (M), Public Health Nursing: Population- Centered Health care in the Community, Elsevier, 7th Edition, 2008
- 3. Rao (KS), Introduction to Community Health Nursing, S.I. Publications, Chennai, 1989
- 4. T.N.A.I., A Community Health Nursing Manual, New Gian Offset Press, New Delhi, 1989

MIDWIFERY OBSTETRICAL NURSING

Subject Code: DNRAS1-204 L T P C Duration: 60 (Hrs.)

3 1 0 4

Course Objectives:

This course is designed for 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.

UNIT-I (15 Hrs.)

Introduction to midwifery and obstetrical Nursing: Introduction to concepts of midwifery and obstetrical Nursing, Trends in midwifery and obstetrical nursing, Historical perspectives & current trends, Legal and ethical aspects in midwifery, Preconception care and preparing for parenthood, Role of nurse in midwifery and obstetrical care ,National policies and legislations in relation to maternal health and welfare, Maternal morbidity, mortality and fertility rates Perinatal morbidity and mortality rates.

Review of anatomy and physiology of female reproductive system and fatal development: Female pelvis – general description of the bones joints, ligaments, planes of the pelvis diameters of the true pelvis, important landmarks, and variations in pelvis shape.

UNIT-II (15 Hrs.)

Female organs of reproduction- external genitalia, internal, genital organs and their anatomical relations, musculature—blood-supply, nerves, lymphatic, pelvic cellular tissue, pelvic peritoneum Physiology of menstrual cycle, Human sexuality, Fetal development, Review of Genetics.

Assessment and management of pregnancy (ante-natal): Normal pregnancy,

Physiological changes during pregnancy: Reproductive system, Cardio vascular 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.

UNIT-III (15 Hrs.)

Ante-natal care: Objectives, Assessment: History and physical examination, Antenatal Examination, Modalities of diagnostics: invasive, non-invasive, ultrasonic, cardio tomography, NST, CST. Signs of previous child-birth.

Relationship of foetus to uterus and pelvis: Lie, Attitude, Presentation, Position paravaginal examination.

Per vaginal examination, Assessment of fetal wellbeing, Screening and assessment for high risk: Risk approach.

Education for child-birth, Preparation for safe confinement

Psycho-social and cultural aspects of pregnancy: Adjustment to pregnancy, Unwed mother, Single parent, Teenage pregnancy, Sexual violence, Substance use and Adoption.

UNIT-IV (15 Hrs.)

Assessment and management of intra-natal period, Assessment and management of women during post natal period, Assessment and management of normal neonates, High-risk pregnancy - assessment & management, Abnormal Labour – assessment and management, Assessment and management of High risk newborn, Pharmaco-therapeutics in Obstetrics, Family Welfare Programme.

- 1. Fraser (DM), MMyles Textbook of Midwives, Churchill Livingstone, 14th Edtion, 2003
- 2. Dutta (DC), Textbook of Obstetrics, New Central Book Agency.
- 3. Lowdermilk, Maternity Nursing, Mosby, 7th Edition.
- 4. Willams, Obstetrics, McGrawhill, 22nd Edition.
- 5. Bobak, Maternity Nursing Care, Elsevier.
- 6. Maternity & Child Health Nursing Care for the childbearing family, LWW, 5th edition.
- 7. Wong, Maternity Child Nursing Care, Mosby, 3rd Edition.

COMMUNITY HEALTH NURSING - LAB

Subject Code: DNRAS1-205 L T P C Duration: 60 (Hrs.)

0 0 4 2

Course Objectives:

The program vocational learning outcomes for this program are Communicate therapeutically with clients and members of the health care team. Assess clients across the life span, in a systematic and holistic manner. Plan safe and competent nursing care, based upon a thorough analysis of available data and evidence-informed practice guidelines.

Course Outcomes:

- Define the practice of community-based nursing
- Examine the impact of culture, socioeconomic status, lifestyle, environment and violence on the health of a community.
- Determine at risk populations and role of community nurse
- Develop holistic approaches to performing a community-needs assessment.

Practicals

- 1. Visit to a local area to document environmental asserts reiver / forest / grassland / hill/mountain.
- 2. Visit to all local polluted site urban / rural / industrial / agriculture.
- 3. Study of common plants, insects, birds.
- 4. Study of simple ecosystems pond, river, hill slopes, etc.

MIDWIFERY OBSTETRICAL NURSING - LAB

Subject Code: DNRAS1-206 L T P C Duration: 60 (Hrs.)

0 0 4 2

Course Objectives:

This course is designed for 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 risks pregnant woman during antenatal, natal and post natal periods in hospitals and community settings.

Course Outcomes:

- Review the anatomy and physiology of female reproductive system and apply this knowledge in obstetrics and gynaecological nursing practice.
- Describe the physiology of menstrual cycle, fertilization and development of ovum, physiological and psychological adaptation during pregnancy and relationship of the changes to diagnostic procedures and management of pregnancy, labour and puerperium
- Describe the common drugs used in obstetrics and their effects during pregnancy, labour and puerperium.
- Discuss the common obstetrical and gynaecological problems facing women during childbearing and postmenopausal period.

Practicals:

- Assessment of pregnant women
- Assess woman in labour
- Carry out per- vaginal examinations
- Conduct normal deliveries
- Perform episiotomy and suture it
- Resuscitate newborns
- Assist with Cesarean 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 newborn at risk

THIRD SEMESTER

MEDICAL SURGICAL NURSING

Subject Code: DNRAS1-301 L T P C Duration: 60 (Hrs.)

3 1 0 4

Course Objectives:

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.

Course Outcomes:

- Practice within the nurse's legal scope of practice, in accordance with the policies and procedures of the practice setting.
- Demonstrate responsibility and accountability for the quality of nursing care provided to patients and their families while demonstrating responsibility for continued competence, reflection, self-analysis and self-care.

UNIT-I (15 Hrs.)

Nursing management of patient with disorders of Ear Nose and throat

Review of anatomy and Physiology of the Ear Nose and Throat ,Nursing Assessment-History and physical assessmen6t, Etiology, pathophysiology, clinical, manifestations, diagnosis, treatment, modalities and medical & surgical 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, mastoidities, tumours _ Inner ear - Meniere's disease, labyrinthitis, otottoxicity, tumours_ Upper airway infections-common cold, sinusitis, rhinitis, pharyngitis, tonsillitis and adenoiditis, peritonsilar abscess, laryngitis. Upper respiratory airway-epistaxis, Nasal obstruction.

UNIT-II (15 Hrs.)

Nursing management of patient 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 nursing management of eye disorders. Blindness, National blindness control program.

UNIT-III (15 Hrs.)

Nursing management of patient with Neurological disorders: Review of anatomy and physiology of the neurological system, Nursing assessment-History and physical and neurological assessment and Glasgow coma scale, Etiology, pathophysiology, clinical manifestations, diagnosis, treatment modalities and medical & surgical nursing management of neurological disorders, Congenital malformation, Headache, Head injuries, Spinal Injuries.

UNIT-IV (15 Hrs.)

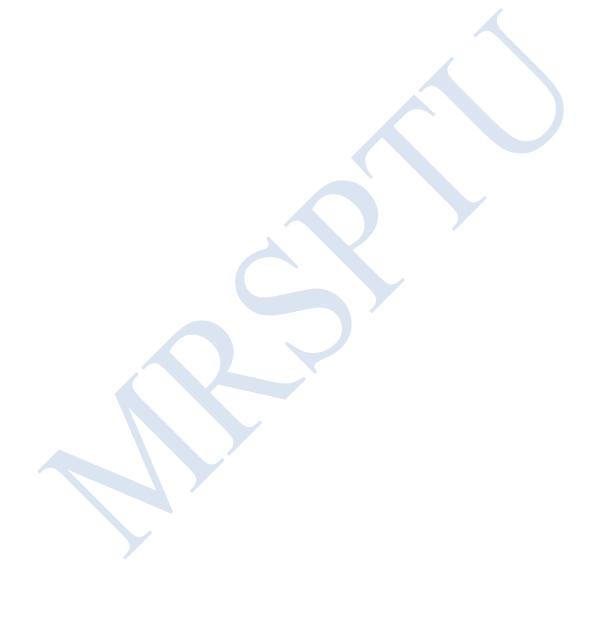
Nursing management of patient with disorders of female reproductive system:

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 nursing management of disorders of female reproductive system, Vaginal disorders; infections, discharges,

fistulas, Vulvar Disorders: cysts, tumours Diseases of breasts, Nursing management of patient with Burns, reconstructive and cosmetic surgery, Nursing management of patient with oncological conditions.

Recommended Books:

- 1. Brunner (V), Medical Surgical Nursing, LWW, 10th Edition.
- 2. Black, Medical Surgical Nursing: Clinical Management for positive outcomes, Elsevier, 7th Edition.
- 3. Willams, Understanding Medical Surgical Nursing, Jaypee, 3rd Edition.
- 4. Timby, Introductory Medical Surgical Nursing, LWW, 9th Edition.
- 5. Lewis, Medical Surgical Nursing Assessment & Management of Clinical Problems, Elsevier 7^{th} edition.
- 6. Ignatavicius, Critical Thinking for Collaborative Care, Elsevier, 5th Edition.



OPERATION THEATER TECHNIQUES

Subject Code: DNRAS1-302 L T P C Duration: 60 (Hrs.)

3 1 0 4

Course Objectives: This course is designed to prepare OT nurses with specialized knowledge and skills in assisting for various surgical procedures and practicing infection control measures.

Course Outcomes:

On completion of this course the student will:

- 1. Demonstrate the skill in assisting different operative procedures.
- 2. Apply nursing process in pre-operative, operative and post-operative stabges.
- 3. Demonstrate skill in organization of tasks, time, motion, equipment, supplies, materials and resources.
- 4. Demonstrate knowledge and principles of sterilization and disinfection
- 5. Participate with other surgical team members,

UNIT I (15 HRS)

OPERATION THEATER TABLE ORGANIZATION AND INFECTION CONTROL

Equipment's and amenities • Different types of tables and accessories • Organization of table and equipment's nurses role and responsibilities

Environment: - Cleaning, disinfecting O.R. Area, equipments, Air conditioning system, • Aseptic techniques – Handwashing, use or mask, gowning, gloving, head cover • Sterilization: - Preparing and packing of instruments, dressing materials, linen, suture materials, drainage tubes and catheters, care of electro-medical equipments – Handling and storing of sterilized material, equipments, instruments. • Collection of various speciments for laboratory tests • Bio-Medical Waste Management: - Universal standards and it's application in O.R. Nursing. – Nurses Role and Responsibility

UNIT II (15 HRS)

PREPARATION AND ASSISTING FOR VARIOUS SURGICAL PROCEDURES

Setting up of operation room and table • Setting up of trays and trolleys for various surgical procedures • Part preparation for surgical procedures • Positioning and drapping according to the surgical procedures. • Incisions for various surgical procedures • Minor surgeries-surgical instruments and suturing materials • Major surgeries-surgical instruments and suturing materials: o General, Gynaeco o Obstetrics, o Orthopaedics, o Plastic and Reconstructive surgery, o Ophthalmic, o Head and Neck, o ENT o Cardio-Thoracic, o Neuro, o Paediatric o Dental. • Laser and robotic surgery • Records and reports Nurses role and responsibilities

UNIT III (15 HRS)

OPERATING MICROSCOPES, SUTURE MATERIAL & NEEDLES, ENDOSCOPIES, BANDAGE, SPLINTS, CASTS AND TRACTION

Operating microscopes- Types • Accessories • Attachments, • Uses • Disinfection • Maintenance and storage.

Suture material and needles- Types • Uses • Disinfection • Storage

Endoscopies - Definition • Types • Uses • Maintenance and storage • Preparation of patients • Nurses role and responsibilities

Bandages- Types • Uses • Preparation • Maintenance and storage

UNIT IV (15 HRS)

a. RECOVERY ROOM/SURGICAL INTENSIVE CARE UNIT

Set up and organisation • Management of patient • Reporting and recording • Transporation of patient Nurses role and responsibility

b. FLUID THERAPY

Fluid and electrolytes • Blood and blood components • Plasma and plasma • Allergies and reactions

• High risk patients • Management of anaphylactic shock • Records and reports

Recommended Books:

- 1. Nursing Assistants book by Pamela J. Carter
- 2. The Handbook for Nursing Associates and Assistant Practitioners by Gillian Rowe
- 3. The Nursing Associate's Handbook of Clinical Skills by Ian Peate

MENTAL HEALTH NURSING

Subject Code: DNRAS1-303 L T P C Duration: 60 (Hrs.)

3 1 0 4

Course Objectives:

 This course is designed for developing an understanding of 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.

Course Outcomes

- Practice within the nurse's legal scope of practice, in accordance with the policies and procedures of the practice setting.
- Demonstrate responsibility and accountability for the quality of nursing care provided to
 patients and their families while demonstrating responsibility for continued competence,
 reflection, self-analysis and self-care.

UNIT-I (15 Hrs.)

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 Policy is a vis National health Policy, National Mental health Programme, Mental Health Team, Nature and scope of Mental Health nursing, Role and function of Mental Health Nurse in various settings and factors affecting the level of nursing practice. Concepts of normal and abnormal behaviour.

UNIT-II (15 Hrs.)

Principles and Concepts of Mental Health Nursing: Definition: Mental Health nursing and terminologies used Classification of mental disorders: ICD Review of personality development, defense mechanisms Maladaptive behavior of individuals and groups: stress, crisis and disaster(s), Etiology: Bio – psycho – social factors, Psychopathology of mental disorders: Review of structure and functions of brain, limbic system and abnormal neuro Transmission Principles of Mental, Health Nursing practice, Standards of Mental, Health Nursing practice.

UNIT-III (15 Hrs.)

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, 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 interventions.

UNIT-IV (15 Hrs.)

Treatment modalities and therapies used in mental disorders: Psycho Pharmacology, Psychological therapies, nursing management of patients with Schizophrenia, and other psychotic disorders. Nursing management of patients with mood disorders. Nursing management of patients with neurotic, stress related and somatization disorders, nursing management of patients with substance use disorders, nursing management of Childhood and adolescent disorders including mental deficiency, Legal issues in mental health nursing.

Recommended Books:

- 1. A guide to mental health and psychiatric nursing by R Sreevani
- 2. A textbook of psychiatric nursing by Bimla Kapoor
- 3. Textbook of mental health nursing I and II by Bharat Pareek



MANAGEMENT OF NURSING SERVICES & EDUCATION

Subject Code: DNRAS1-304 L T P C Duration: 60 (Hrs.)

3 1 0 4

Course Objectives:

• The course is designed to enable to student to acquire understanding of management of clinical and community health nursing services, Nursing Educational programme.

Course Outcomes:

- Understand the principles and functions of management
- Understand the elements and process of management.
- Appreciate the management of nursing services in the hospital and community.
- Apply the concepts, theories and techniques of organizational behaviour and human relations. Develop skills in planning and organizing in service education.

UNIT-I (15 Hrs.)

Introduction to Management in Nursing:- Definition, Concepts & theories, Functions of Management, Principles of Management, Role of a Nurse as a Manager.

Management Process:- Planning; mission, Philosophy, Objectives & Operational plan, Staffing: Philosophy staffing study, norms, activities, patient Classification system, Scheduling.

Human resources, Management; recruiting, selecting, development, retaining, Promoting, Superannuation. Budgeting: - Concept, Principles, types cost, benefit analysis and audit.

Material Management: Equipment & Supplies, Directing (Leading) Process. Controlling: Quality Management, Program evaluation Review Technique (PERT), Bench marking, Activity Plan (Gantt chart).

UNIT-II (15 Hrs.)

Management of Nursing Services in the Hospital & Community Planning: Human Resource Management, Budgeting proposal, projecting requirements for staff, equipment and supplies, Material Management, procurement, inventory control, auditing and maintenance in: Hospital & Patient care units, Emergency and disaster Management. Directing & Leading: Delegation, Participatory Management. Controlling: Nursing rounds / Visits, Nursing protocols manuals. Quality Assurance model, Documentation. Records & reports performance appraisal.

UNIT-III (15 Hrs.)

Organizational Behavior and Human Relations:-Concept and theories of Organizational Behaviors, Review 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 & employees Unions & Collective bargaining.

In service Education: Nature & Scope of in service education program, Organization of in service education, Principles of adult learning, planning for in service education program, techniques, Methods & Evaluation of staff education programme, Preparation of Report.

UNIT-IV (15 Hrs.)

Management of Nursing educational institutions: Establishment of Nursing, Educational institution INC norms and guidelines, Co – ordination with: Regulatory bodies, Accreditation, Affiliation, Philosophy / Objectives, Organization,

Nursing as a Profession: Nursing as a Profession, Professional ethics, Practice Standards for Nursing, INC Consumer Protection act, Legal Aspects in Nursing,

Professional Advancement: Continuing Education, Career Opportunity Collective bargaining, Membership with Professional, Organizations, national & International. Participation in research activities. Publications, Journals, News Papers etc.

- 1. Basavanthappa (BT), Nursing Administration, Jaypee Brother, New Delhi, 2002.
- 2. Stanhope (M), Public Health Nursing: Population-centered Health Care in the Community, Elsevier, 7th Edition, 2008.
- 3. T.N.A.I., A Community Nursing Manual, New Gian Offset Press, New Delhi, 1989

MEDICAL SURGICAL NURSING - LAB

Subject Code: DNRAS1-305 L T P C Duration: 60 (Hrs.)

0 0 4 2

Course Outcomes:

At the end of the course, students will be able to: Appreciate the trends & issues in the field of Medical – Surgical Nursing as a specialty. Apply concepts & theories related to health promotion. Appreciate the client as a holistic individual. Perform physical, psychosocial assessment of Medical – Surgical patients.

Experiments:

- Perform examination of ear, nose and throat
- Assist with diagnostic procedures Assist with therapeutic
- Procedures: Instillation of drops
- Perform/ assist with irrigations
- Perform examination of eye
- Assist with diagnostic procedures
- Assist with therapeutic procedures
- Apply eye bandage
- Apply eye drops
- Perform neurological examination
- Use Glasgow coma scale
- Assist with gynaecological examination

OPERATION THEATER TECHNIOUES - LAB

Subject Code: DNRAS1-306 L T P C Duration: 60 (Hrs.)

0 0 4 2

Course Outcomes:

At the end of the course, students will be able to learn operation theatre techniques for assisting various surgical procedures and practice infection control measures

Experiments:

- i. Neurological assessment; Glasgow coma scale
- ii. Pulse oximetry
- iii. Arterial B P monitoring
- iv. Venous access, ABG collection monitoring
- v. Oxygen administration, Suctioning, Respiratory therapy, Tracheotomy toilet
- vi. Airway Management a) Application of Oro Pharyngeal Airway b) Oxygen therapy c) CPAP (Continuous Positive Airway Pressure) d) Care of Tracheostomy e) Endotracheal Intubation
- vii. Care of intercostals drainage
- viii. Nebulisation
- ix. Chest physiotherapy
- x. Monitoring of critically ill patients clinically & with monitors, CRT (Capillary Refill Time), ECG
- xi. Gastric Lavage
- xii. Setting of Ventilators
- xiii. Assessment of Neonates: Identification & assessment of risk factors, APGAR Score
- xiv. Admission & discharge of critically ill patients
- xv. OG (Orogastric) tube insertion
- xvi. Thermoregulation management of thermoregulation & control, Use of hypothermia machines
- xvii. Administration of Drugs: I/M, IV injection, IV Cannulation & fixation infusion pump, Calculation of dosages, Monitoring fluid therapy.
- xviii. Administration of Blood and its components.
- xix. Procedures for prevention of infections: Hand washing, disinfections & sterilization, surveillance, fumigation. Collection of specimens related to critical care.
- xx. Burns: assessment, calculation of fluid-crystalloid and colloid
- xxi. Maintenance of intake and output chart.
- xxii. Wound dressing and prevention of contractures xxiv. Rehabilitation

- 1. Nursing Assistants book by Pamela J. Carter
- 2. The Handbook for Nursing Associates and Assistant Practitioners by Gillian Rowe
- 3. The Nursing Associate's Handbook of Clinical Skills by Ian Peate