

# **CURRICULUM**

## **Bachelor of Science in Nursing (B.Sc. in Nursing)**



**Far Western University  
Nepal  
2023**

# Far Western University

## Brief History of University

Far Western University (FWU) is a government-funded institution established through parliamentary legislation in 2010. The university's primary mission is to provide high-quality education in one of the country's most remote regions, with a curriculum tailored to meet national and international contemporary educational needs. FWU has a history of offering programs in various faculties, including Agriculture, Art and Humanities, Education, Engineering, Law, Management, and Science.

Recognizing a significant deficiency in health and medical services in this region, FWU has embarked on establishing a faculty of health sciences. To achieve this mission, a tripartite agreement was reached on January 24, 2022, involving FWU, the Ministry of Health and Population, and the Ministry of Education, Science, and Technology. Dadeldhura Medical College (DMC) has been established as a result of this agreement. Dadeldhura Hospital will serve as the core facility for FWU, responsible for conducting the teaching and learning activities within the faculty of Health Sciences including bachelor in Nursing (B.Sc in Nursing)

The infrastructure for teaching and learning, as well as the curriculum, will be developed in accordance with the standards and guidelines set by the Nepal Medical Council (NMC), the Medical Education Commission (MEC), and the Nepal Health Professional Council to ensure the highest quality of education and training in the field of health sciences.

The B. Sc. nursing programme is the four years programme which prepares academically sound nursing graduates to fulfil the demand of graduate nurses to carry out the role of care provider, manager, teacher and researcher in various health institutions in the country. The programme includes the theoretical and practical coursework for developing essential knowledge and clinical competence in practicing nursing in various areas including adult, paediatric and maternity nursing in the hospital and community settings. The curriculum of B. Sc. nursing is futuristic in orientation and has included "Geriatric nursing" and "Psychiatric nursing" courses for fulfilling the expanding role of nurse in health care system. In order to facilitate better learning, this curriculum uses integrated approach in its course organization and participatory approach in the teaching learning process. This curriculum was implementing in annual system and this revised version is planned in semester system. As a result this curriculum is planned to be implemented in 8 semesters during the 4 years of period of the program.

## Philosophy

The philosophical statements for the B. Sc. Nursing programme are built on holistic paradigm. The following beliefs of the nursing faculty regarding the concept of nursing, health, individual and environment serve as the foundation upon which the curriculum of B.Sc. Nursing programme is rooted.

**Belief about Nursing:** Nursing is a caring profession designed to help individual, family and community in order to achieve the highest level of health and wellbeing. Nurses apply relevant nursing theories while making decisions and solving problems in nursing situations.

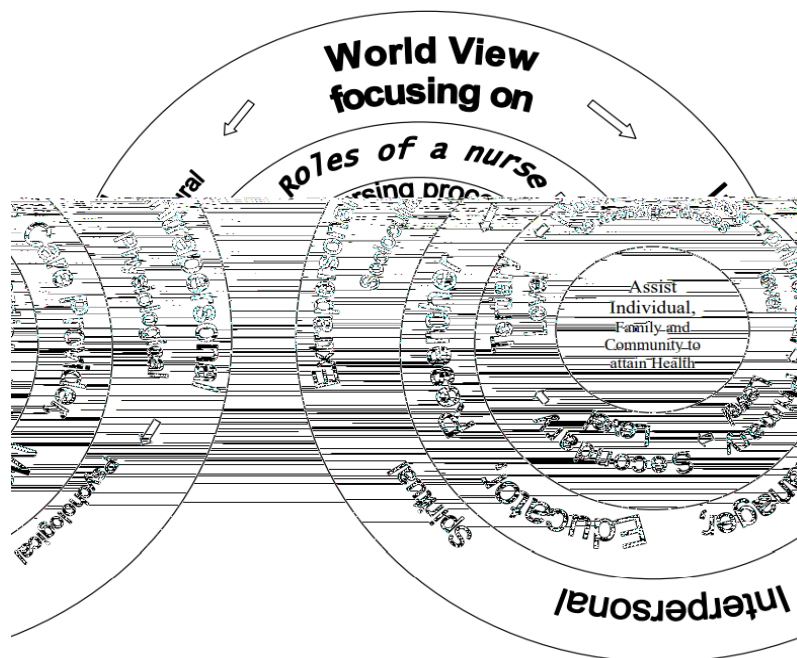
**Belief about Health:** Health is a personal state of wellbeing that enables the person to lead physically, psychologically, socially and economically productive life by preventing illness and promoting health. Health is not a privilege but the right of each individual. The nurse as a member of health team practices healthy habits and motivates others to remain healthy.

**Belief about Individual:** An individual is a unique bio-psycho-social and spiritual being, capable of thinking, deciding and adapting to the environment in his or her own way during times of health and illness. An individual, as a member of the family and community has certain responsibilities to support the socio-economic and political structure of the community.

**Belief about Environment:** Individual's health habits and lifestyle patterns are determined by socio- economic and cultural environment where he/she lives. Individual as a unit of the family and community uses the available resources from the environment to facilitate healthy living. The socio-economic and political conditions of the society can greatly affect the health and educational system of the country. A healthy society promotes the development of healthy citizens.

In relation to student learning, the teacher facilitates the student by creating an environment that is conducive to learning and student has the responsibility of studying and learning. Adult learning constitutes critical analysis and evaluation of the learner's performance by the self, peers and teachers and the feedback received is used in determining the progress towards achievement of the program objectives.

**Conceptual framework**



Programme

Fig. 1: Conceptual Framework for B, Sc. Nursing (Adopted from Neuman's Model)

The conceptual framework for the B. Sc. Nursing Programme (Fig. 1) is based on the Neuman's System Model. This model views individual as holistic being that has physiological, psychological and socio cultural components that are influenced by developmental experiences.

The framework focuses on the individual, family and community as a unique system and a composite of factors and characteristics. The interrelationships of physical, psychological, socio-cultural and spiritual factors are the important determining variables in the nature and degree of system reaction. In this framework the intra, inter and extra personal environments are considered as the created environment, which is dynamic, and is important in mobilizing all system variables in the state of health as well as illness. The health or wellness is considered as a state of saturation or free of disruption and illness as a state of insufficiency or disruption yet to be satisfied. The client constantly exchanges energy with environment to maintain equilibrium in the health-illness continuum. In conditions of disequilibrium, the nurse intervenes to assist client to stabilize and return to the optimum level of wellness.

The framework considers nursing process as a tool in assisting individual, family and community to attain optimum level of wellness through various levels of prevention i.e. from primordial, to primary, secondary and tertiary levels of prevention. As a member of health team, the nurse performs various roles like the care provider, manager, educator and researcher.

### **Programme aim**

The B. Sc. Nursing programme aims at preparing competent graduate nurses who can function independently as members of health teams in providing holistic nursing care to individuals and groups at various levels of prevention (primordial to tertiary level), function in leadership positions in managing client care in the hospital as well as the community care settings, teach in nursing programs and other related programs and participate in research activities.

### **Programme objectives**

On completion of this programme, the students will be able to:

1. Utilize sound knowledge in planning and providing comprehensive care to the clients.
2. Communicate effectively with individuals and groups in different settings.
3. Carry out diagnostic and therapeutic nursing measures competently.
4. Provide nursing care to clients with different health problems competently.
5. Use nursing process in providing individualized nursing care.
6. Take leadership role in planning, directing, supervising and evaluating nursing care management activities.
7. Demonstrate effective teaching skills in educating individuals and groups.
8. Demonstrate understanding of the socio-cultural beliefs and practices, which influence individuals' responses to health and illness.
9. Utilize principles of primary health care in planning activities for the maintenance of health of people.

10. Participate in research activities for the promotion of health and wellbeing of the people.
11. Demonstrate positive attitude in professional relationships.
12. Take responsibility to seek knowledge for personal and professional development.

### **Eligibility criteria for admission**

To qualify for admission to the B.Sc. Nursing Program, an applicant must meet one of the following criteria:

- In general candidates must have passed 10+2 or equivalent qualifications from recognized universities/boards with Physics, Chemistry and Biology (PCB) and having passed in each subject securing a minimum of 50% in PCB and also in aggregate or GPA 2.4
- Selection is based on the merit list of common Entrance Examination conducted by Medical Education commission (MEC).

### **Career Opportunity**

This programme will produce competent nurses who can work proficiently as leaders, advocates, collaborators, researchers and teachers in variety of government and non-governmental settings committed to the improvement of the health of the people.

### **Competency based curriculum in b.sc nursing programme**

As internationally competency based curriculum will be followed as suggested by MEC, an attempt has been made to incorporate competencies in practicum of first year in this curriculum. Remaining 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year will also include competencies in near future. Competencies are graded on the basis of domain (knowledge/skill/attitude/communication) and level which follows Miller's pyramid (knows/knows how/shows how/performs).

### **Examinations**

There will be internal assessments and final examination every year.

Internal assessment will carry 30% of weightage while final assessment will carry 70% of weightage. A student must score 50 percent in internal assessment in order to be eligible to appear in final examination. The pass mark for final examination is 50 percent.

A student will be continuously evaluated in the form of formative assessment in order to improve his/her learning.

### **Barrier system in b.sc nursing programme**

There is no barrier in any semester of this programme. However, if a student does not complete the course by 10 years from the joining academic year, the candidate will be disqualified and his/her university registration will be cancelled.

### **Grading System:**

This curriculum will follow the grading system as mentioned below for overall evaluation.

Percentage	Grading	Grade Point Average (GPA)	Cumulative Grade point Average (CGPA)	Remarks
90 and above	A	4	4	Distinction
80-89.9	A-	3.7	3.7-3.99	Very good
70-79.9	B+	3.3	3.3-3.69	First division
60-69.9	B	3.0	3.0-3.29	Second division
50-59.9	B-	2.7	2.7-2.99	Pass in individual paper
<50	F	2.7	<2.7	Fail

**Note:** A candidate must secure at least 3.0 GPA in Internal assessment, 2.7 GPA in Final assessment and 3.0 in CGPA to pass the programme.

### **Duration of the course**

The total program duration will be of four years.

### **Evaluation scheme**

Evaluation of the student's performance will be subjects wise and will be evaluated by:

- Formative Evaluation ( Internal Assessment) and
- Summative Evaluation (Final Examination)

Details of the Evaluation Schemes will be as decided by the Examination Board of the University

### **Degree awarded**

A graduate after completion of this course will be awarded, B. Sc.in Nursing by Far Western University

## OVERVIEW OF BACHLOR OF SCIENCE IN NURSING PROGRAM

### First Year

Code No	Name of the course	Total hours	Marks
BSN1	Integrated Health Science I ( Anatomy, Physiology, Biochemistry) (T)	140	100
BSN2	Integrated Health Science II (Pathology, Pharmacology, Microbiology)(T)	160	100
BSN3	Integrated Health Science (P)	168 (4 wks)	100
BSN4	Fundamentals of Nursing (T)	150	100
BSN 5	Fundamentals of Nursing (P)	672 (16 wks)	100
BSN6	Community Health Nursing I (T)	100	100
BSN7	Community Health Nursing I (P)	252 (6 wks)	100
BSN8	Nutrition & Dietetics (T)	75	50
	<b>Total</b>	<b>Th 625hrs</b> <b>Cl 1092</b> <b>Total 1717 hrs</b>	<b>750</b>

**Study block= 15 wks x 42 = 630 hrs**

**41 wks**

**Practical / Clinical = 26 wks x 42 = 1092 hrs**

**Internal assessment = 2 weeks**

**Revision = 1 wk**

**Final exam = 2 weeks**

**Co-curricular activities (Sport) =1 week**

**Vacation = 5 wks**

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**Total 52 weeks**

## Second Year

Code No	Name of the Courses	Total Hours	Marks
BSN9	Community Health Nursing II (T)	100	100
BSN10	Community Health Nursing II (P)	210(5wks)	100
BSN11	Adult Medical Nursing (T)	150	100
BSN12	Adult Medical Nursing (P)	462 (11wks)	100
BSN13	Adult Surgical Nursing (T)	150	100
BSN14	Adult Surgical Nursing (P)	294(5wks)	100
BSN15	Geriatric Nursing (T)	50	50
BSN16	Geriatric Nursing (P)	126 (3wks)	50
BSN17	Nursing Concepts (T)	75	50
BSN18	Social & Behavioral Science (T)	50	50
	<b>Total</b>	<b>Th= 575 hrs</b> <b>Cl= 1092hrs</b> <b>Total 1667 hrs</b>	<b>800</b>

**Study block= 15 wks x 42 = 630 hrs**

**Practical / Clinical = 26 wks x 42 = 1092 hrs**

**41weeks**

**Internal assessment = 2 weeks**

**Revision = 1 wk**

**Final exam = 2 weeks**

**Co-curricular activities (Sport) =1 week**

**Vacation = 5 wks**

**Total 52 weeks**

## Third Year

Code No	Name of the Courses	Total Hours	Marks
BSN19	Prenatal Nursing (T)	75	100
BSN20	Prenatal Nursing (P)	168 (4wks)	75



BSN21	Labor and Childbirth (T)	100	100
BSN22	Labor and Childbirth (P)	210(5wks)	100
BSN23	Postnatal Nursing (T)	75	100
BSN24	Postnatal Nursing (P)	168 (4wks)	75
BSN25	Gynecological Nursing (T)	50	50
BSN26	Gynecological Nursing (P)	126(3wks)	50
BSN27	Child Health Nursing (T)	100	100
BSN28	Child Health Nursing (P)	210(5wks)	100
BSN29	Psychiatric Nursing (T)	100	100
BSN30	Psychiatric Nursing (P)	210(5wks)	100
	<b>Total</b>	<b>Th= 500 hrs</b> <b>Pr= 1092</b> <b>1592</b>	<b>1050</b>

**Study block= 13 wks x 42 = 546 hrs**

**Practical / Clinical = 26 wks x 42 = 1092 hrs**

**39 weeks**

**Internal assessment = 2 weeks**

**Revision = 2 wk**

**Final exam = 3 weeks**

**Co-curricular activities (Sport) =1 week**

**Vacation = 5 wks**

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**Total 52 weeks**

#### Fourth Year

Code No	Name of the Courses	Total Hours	Marks
BSN31	Leadership & Management (T)	100	100
BSN32	Leadership & Management (P)	378 (9 wks.)	100
BSN33	Health Economics in Nursing (T)	50	50
BSN34	Educational Science (T)	60	100
BSN35	Educational Science (P)	252(6wks)	100
BSN36	Research and Biostatistics (T)	100	100
BSN37	Research and Biostatistics (P)	252(6wks)	100
BSN38	Elective Subject (T) Operation Theatre Management Child Health Nursing	100	100
BSN39	Elective Subject (P) Operation Theatre Management Child Health Nursing	378 (9wks)	100
	<b>Total</b>	<b>Th= 410hrs</b> <b>Pr = 1260</b> <b>Total 1670 hrs</b>	<b>850</b>

**Study block= 11 wks x 42 = 462 hrs**

**Practical / Clinical = 30 wks x 42 = 1176 hrs**

**41 weeks**

**Internal assessment = 2 weeks**

**Revision = 1 wk**

**Final exam = 2 weeks**

**Co-curricular activities (Sport) =1 week**

**Vacation = 5 wks (summer=1, winter=1, Dashain+ Tihar = 3)**

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**Total 52 weeks**

## **B.SC NURSING FIRST YEAR COURSE**

BSN1	Integrated Health Science I ( Anatomy, Physiology, Biochemistry) (T)
BSN2	Integrated Health Science II (Pathology, Pharmacology, Microbiology)(T)
BSN3	Integrated Health Science (P)
BSN4	Fundamental of Nursing (T)
BSN 5	Fundamental of Nursing (P)
BSN6	Community Health Nursing I (T)
BSN7	Community Health Nursing I (P)
BSN8	Nutrition & Dietetics (T)

### Overview of hour wise distribution

Subject	Mode of Assessment						
	Theory			Practical			Grand total marks
	Internal Assessment	Final Assessment	Total Marks	Internal Assessment	Final Assessment	Total Marks	
Integrated Health Science I ( Anatomy, Physiology, Biochemistry)	30	70	100	-	-	-	100
Integrated Health Science II (Pathology, Pharmacology, Microbiology)	30	70	100	-	-	-	100
Integrated Health Science III	-	-	-	50	50	100	100
Fundamental of Nursing	30	70	100	50	50	100	200
Community Health Nursing I	30	70	100	50	50	100	200
Nutrition & Dietetics	15	35	50	-	-	-	50

### Integrated Health Sciences I (Theory)

Unit	System	Anatomy	Physiology	Biochemistry	Credit Hour
1	General Concept	8	4	19	
2	Blood	4	6	4	
3	Musculo-skeletal sys	7	4	2	
4	Neuro-sensory	6	5	2	

5	Special senses	4	4	0	
6	Respiratory system	4	6	1	
7	CVS system	5	6	2	
8	GI system	4	4	3	
9	Renal System	3	4	3	
10	Reproductive system	5	4	1	
11	Endocrine system	4	3	3	
	Total Hours	54	50	40	144 (9 cr. hr.)

### **Integrated Health Sciences II (Theory)**

Unit	System	Pathology	Pharmacology	Microbiology	Credit Hour
1	General Concept	6	18	6	
2	Blood	4	3	5	
3	Musculo-skeletal system	4	5	3	
4	Neuro-sensory	4	9	2	
5	Special senses	5	0	4	
6	Respiratory system	3	5	5	
7	CVS system	4	10	3	
8	GI system	6	6	4	
9	Renal System	4	3	2	
10	Reproductive system	4	7	6	
11	Endocrine system	6	4	0	
	Total Hours	50	70	40	160 (10.0 cr.hr)

## INTEGRATED HEALTH SCIENCES I (Theory)

<b>Course No: BSN 1</b>	<b>Placement: First year</b>
<b>Hours: 140</b>	<b>Marks: 100</b>

### Course description

This course will facilitate students in acquisition of fundamental knowledge in integrated health sciences in relation to different systems of the human body focussing on anatomy, physiology and biochemistry. It will enable students to apply this knowledge and skill in providing nursing care to the patients, families and communities in different settings.

### Course contents

#### **ANATOMY 50 hrs**

##### **Unit 1 General concepts 8hrs**

- Introduction: Definition, subdivisions, anatomical positions and regions of the body.
- Cell structure: cell plasma, membrane and organelles.
- Definition of tissue and types: connective tissue, epithelial tissue, muscular tissue, nervous tissue; distribution and function.
- Embryology and stages of embryonic development: gametogenesis, menstrual cycle, fertilization, implantation, development during embryonic and fetal periods, placenta, fetal membranes, umbilical cord.
- Genetics: structure and classification of human chromosomes, chromosomal disorders with examples, Mendelian inheritance, Teratogenic agents.

##### **Unit 2 Blood, Lymphatic and Immune system 4 hrs**

- Lymph organs and tissue: gross and microscopic features of lymph nodes, spleen, thymus, tonsils.
- Lymph vessels: drainage of lymph.

##### **Unit 3 Musculoskeletal System 7 hrs**

- Definition of terms: bones, joints, sutures, cartilage, fontanelles, tendon, fascia.
- Classification of bones, structure of long bone and its nutrition.
- Skeleton and its parts: Axial skeleton and appendicular skeleton. Axial: cranial bones, facial bones, sternum, ribs and costal cartilages. Appendicular: bones of upper extremities including shoulder girdle and bones of lower extremities including pelvic girdle.
- Joints: types of joints and their movements, suture, fontanelles.

- Muscles: Regional group of skeletal muscles with emphasis on sternocleidomastoid, thoracic muscles, muscles of upper and lower extremities including deltoid, gluteal, inguinal and pelvic floor muscles.
- Anatomical spaces: Axilla, cubital fossa, popliteal fossa.

#### **Unit 4 Neuro sensory System**

4 hrs

- Structure of a neuron, sensory and motor nerve cells.
- Structure of central nervous system: Brain and spinal cord.
- Brain: cerebrum, midbrain, pons, medulla oblongata, cerebellum, gray matter and white matter.
- Meninges, ventricles and CSF circulation.
- Spinal cord: gross features and transverse section; spinal nerves.
- Cranial nerves.
- Autonomic nervous system: division, structure and neurotransmitters.
- Development of nervous system.

#### **Unit 5. Special Senses**

4 hrs

- Eye: coats of eyeball, extraocular muscles, lacrimal apparatus.
- Ear: external, middle and internal ear.
- Skin: layers of skin- epidermis, dermis, hypodermis.

#### **Unit 6. Respiratory System**

4 hrs

- Structure of respiratory tract: nares, nasal cavities, paranasal sinuses, palate, pharynx, larynx, trachea, bronchi, bronchioles and alveoli.
- Structure and position of lungs and pleura: fissures, lobes, surfaces of lungs, parts of pleura and pleural cavity.
- Respiratory muscles: intercostal muscles, diaphragm, accessory muscles of respiration.
- Blood supply to respiratory system.

#### **Unit 7. Cardiovascular System**

4 hrs

- Development of heart and congenital anomalies.
- Heart: position, covering, gross external and internal features, blood vessels entering and leaving the heart. Conducting system of heart.
- Blood supply to heart: coronary arteries.
- Definition of artery, vein, capillary, sinusoids. Microscopic structure of artery and vein.
- Sites for checking pulse and blood pressure.
- Systemic circulation, pulmonary circulation, portal circulation.

#### **Unit 8 Gastrointestinal system**

4 hrs

- Organs of GIT: oral cavity including teeth and tongue, salivary glands, esophagus, stomach, small intestine, large intestine, rectum, anal canal.

- Hepatobiliary apparatus: liver, gall bladder, biliary ducts, pancreas.
- Peritoneum.
- Development of GIT in brief and common congenital anomalies.

### **Unit 9 Renal electrolyte system**

3 hrs

- Organs of urinary system: location and gross features of kidney, ureters, urinary bladder, male and female urethra. Microscopic features of a nephron.
- Development of urinary system in brief with related congenital anomalies.

### **Unit 10 Reproductive system**

4 hrs

- Organs of male reproductive system: scrotum, testes, epididymis, vas deferens, seminal vesicles, ejaculatory ducts, prostate gland, urethra, spermatic cords and external genitalia.
- Organs of female reproductive system: ovaries, fallopian tubes, uterus, supporting ligaments of uterus, vagina, external genitalia, breasts.
- Development of reproductive system in males and females with congenital anomalies.

### **Unit 11 Endocrine system**

4 hrs

- Organs of endocrine system: List the organs of endocrine system.
- Describe the structure and function of hypothalamus, pituitary gland, thyroid and parathyroid glands, pancreatic islets of Langerhans, suprarenal gland.

## **PHYSIOLOGY**

**50 hrs**

### **Unit 1. General Concepts**

4 hrs

- Common terms used in human physiology
  - Definition of human physiology
  - Overview of human physiology
  - Functional organisation of human body into cells, tissues, organ and systems
- Cell and its organisation
  - Definition of cell and its component
  - Cell membrane
  - Cell organelles
- Transport process
  - Diffusion, osmosis and active transport
  - Intercellular communication
- Homeostasis and control system
  - Definition of homeostasis
  - Positive feedback control system
  - Negative feedback control system



- Body fluids and different compartments
- Extracellular fluid
- Intracellular fluid

## **Unit 2 Blood and immune system**

6 hrs

- Composition and function of blood
- Plasma proteins
  - Albumin
  - Globulin
  - Fibrinogen
  - Functions of plasma proteins
- Structure and function of red blood cells
- Blood grouping system
  - Physiological basis of blood grouping
  - ABO blood grouping system
  - Rh blood grouping system
- Classification of white blood cells and function of different types of white blood cells
- Structure and function of platelets
- Haemostasis
  - Definition of haemostasis
  - Role of platelet in haemostasis
  - Mechanism of blood coagulation
- Immune system
  - Overview of immune system
  - Innate immunity
  - Acquired immunity
  - Cellular immunity
  - Humoral immunity
- Clinical
  - Anaemia
  - Hazards of blood transfusion
  - Erythroblastosis fetalis
  - Thrombocytopenia
  - Haemophilia
  - Immunodeficiency state such as AIDS

## **Unit 3 Musculoskeletal System**

4 hrs

- Types of muscles- skeletal muscle, smooth muscle, cardiac muscle
- Neuromuscular transmission
- Skeletal muscle contraction:
  - Sliding filament theory



- Sense of vision
  - Photoreceptors: Rods and cones
  - Light and dark adaptation
  - Visual pathway
- Mechanism of hearing
- Mechanism of gustation
- Mechanism of olfaction
- Functions of skin
- Body temperature regulation and fever
- Clinical aspects:
  - Myopia
  - Hypermetropia
  - Astigmatism
  - Presbyopia
  - Colour blindness
  - Conductive hearing loss
  - Sensory neural hearing loss
  - Presbycusis

#### **Unit 6. Respiratory system:**

6 hrs

- Components of respiratory system
- Pulmonary ventilation:
  - Definition of pulmonary ventilation
  - Mechanism of breathing
  - Lung volume and capacities
  - Spirometry
- Exchange of gases in the lung:
  - Respiratory membrane
  - Diffusion of gases across the respiratory membrane
- Transport of oxygen and carbon-dioxide in the blood:
  - Different methods of transport of oxygen in blood
  - Oxygen haemoglobin dissociation curve
  - Partial pressure of oxygen in alveoli, blood and tissue
  - Different methods of transport of carbon-dioxide in blood
  - Partial pressure of carbon-dioxide in alveoli, blood and tissue
- Exchange of gases in the tissue
- Regulation of respiration: Neural regulation, Chemical regulation
- Clinical aspects:
  - Hypoxia
  - Dyspnoea
  - Cyanosis
  - Respiratory acidosis and alkalosis

- Asthma
- COPD
- Carbon monoxide poisoning
- Tracheostomy
- High altitude sickness

### **Unit 7 Cardiovascular system:**

6hrs

- Components of cardiovascular system
- Functional anatomy of the heart
- Properties of cardiac muscle
- Conducting system of the heart
- Coronary circulation
- Cardiac cycle: Systole, Diastole
- Heart rate and pulse rate: Definition, normal value
- Heart sounds: First and second heart sound
- Cardiac output: Definition, factors regulating cardiac output
- Arterial blood pressure
  - Systolic blood pressure
  - Diastolic blood pressure
  - Mean arterial pressure
  - Pulse pressure
  - Short term regulation
  - Long term regulation
- Clinical aspects:
  - Tachycardia
  - Bradycardia
  - Electrocardiogram (ECG)
  - Shock
  - Hypertension
  - Angina
  - Myocardial infarction
  - Congestive heart failure

### **Unit 8 Gastrointestinal System**

4hrs

- Components of digestive system
- Functional anatomy and functions of different parts of gastrointestinal tract: Stomach, Liver and gall bladder, Small intestine, Large intestine
- Different types of movement of gastrointestinal tract: Deglutition, Peristalsis, Defaecation
- Composition and functions of secretions of digestive tract: Saliva, Gastric juice, Pancreatic juice, Bile, Intestinal juice
- Digestion and absorption of: Carbohydrate, Proteins, Fat

- Clinical aspects:
  - Peptic ulcer
  - Diarrhoea
  - Constipation
  - Vomiting
  - Jaundice

**Unit 9 Renal and electrolyte system:**

4hrs

- Functional anatomy and functions of renal and electrolyte system
  - Kidneys: Nephron
  - Juxtaglomerular apparatus (JGA)
  - Ureters
  - Urinary bladder
  - Urethra
- Urine formation
  - Glomerular filtration
  - Tubular reabsorption
  - Tubular secretion
- Role of kidneys
  - Role of kidneys in blood pressure regulation
  - Role of kidneys in acid base balance
- Micturition: Definition, Micturition reflex
- Renal handling of electrolytes: Sodium, Potassium, Calcium
- Clinical aspects
  - Haemodialysis
  - Renal stones
  - Urinary tract infection (UTI)

**Unit 10 Reproductive system**

4 hrs

- Components of male reproductive system
- Components of female reproductive system
- Pubertal changes: Male and female
- Gametogenesis: Spermatogenesis, Oogenesis
- Functions of male and female sex hormones: Testosterone, Oestrogen, Progesterone
- Menstrual cycle and its hormonal basis:
  - Menstrual cycle: Bleeding phase, proliferative phase, secretory phase
  - Menarche
  - Menopause
- Physiology of pregnancy and lactation:
  - Physiological changes during pregnancy
  - Lactation: Milk ejection reflex

## 8. Clinical aspects:

- Physiological basis of contraceptives
- Klinefelter syndrome
- Turner's syndrome

## **Unit 11 Endocrine system**

3 hrs

- Functional anatomy of major endocrine glands: Pituitary, Thyroid, Endocrine pancreas, Adrenal gland
- Effects of major hormones secreted by endocrine glands:
  - Growth hormone
  - Thyroxine (T4) and T3 (Tri-iodothyronine)
  - Insulin
  - Cortisol
  - Aldosterone
- Clinical aspects:
  - Growth hormone: Acromegaly, gigantism, dwarfism
  - Thyroid hormone: Hyperthyroidism, hypothyroidism, goitre
  - Insulin: Diabetes mellitus
  - Cortisol: Cushing's syndrome

## **BIOCHEMISTRY**

### **Unit 1 General Concepts**

19 hrs

- Terminologies used in Biochemistry, Scope and Importance of Biochemistry in Nursing
- Role of Cell Membrane in Biological Processes, Cell Replication, Metabolism and Production of Energy: Basic Concepts

### **Carbohydrates**

- Definition, Classification, Physical and Chemical Properties (Including Isomerism), Biochemical Significance

### **Lipids**

- Definition, Introduction and Classification (Including Fatty Acids, Phospholipids and Cholesterol) and Clinical Significance, Different Types of Lipids (Emphasis on Fatty Acids, Cholesterol, Phospholipids and Lipoproteins)-Structure, Further Classification (If Any), Clinical Significance in Detail, Introduce Micelles and Liposomes, Description of EFAs.

### **Amino Acids**

- Definition, Structure, Classification and Biochemical Importance, Essential Amino Acids

### **Proteins**

- Definition, Properties, Classification (Structural, Functional and Hierarchy of Structure), Clinical Significance of Biologically Important Proteins (Hemoglobin, Myoglobin, Collagen, Albumin)

### **Nucleotides and Genetics**

- Introduction to Nitrogen Bases, Composition of a Nucleotide, Nucleoside and Nucleic Acids and Organization into chromosomes (Including Structure and Classification of DNA and RNA, Clinical Significance), Genes and the Genetic code

### **Enzymes**

- Definition, IUP Classification with examples, Clinical Significance, Isoenzymes and Co-enzymes (Definition and Clinical Significance), Introduce Cofactors and Apoenzymes, Enzymes in subcellular compartments, Functional and Non-Functional enzymes, Body Enzymes and their biochemical roles in disease processes

### **Overview of Metabolism**

- Digestion and Absorption of carbohydrates and proteins, Intermediary Metabolism, Common Metabolic Pathways (including ETC and Oxidative Phosphorylation), Differences between oxidative and substrate level phosphorylation

### **Carbohydrate Metabolism**

- Glycolysis (Pathway, Energy Calculation, Regulation and Clinical Significance)
- Gluconeogenesis (Pathway, Energy Calculation, Regulation, Clinical Significance)
- Glycogenesis and Glycogenolysis (Pathway, Regulation and Clinical Significance)
- HMP Shunt (Pathway, Regulation and Clinical Significance)
- Galactose and Fructose Metabolism (Pathway, Regulation and Clinical Significance)
- Regulation of Blood Glucose (Hormonal Control), Note on Diabetes Mellitus, , Biochemical Diagnosis of DM, Complications like Hypoglycemia, Hyperglycemic Crisis, Ketosis
- Citric Acid Cycle (Pathway, Regulation and Clinical Significance)
- Electron Transport Chain and Oxidative Phosphorylation (Pathway, Regulation, Inhibitors and Uncouplers)

### **Protein Metabolism**

- Transamination, Deamination, Oxidative Deamination and Urea Cycle (Pathway, Regulation, Energy Calculation and Clinical Significance), Concept of Nitrogen Balance

### **Lipid Metabolism**

- Oxidation of saturated and unsaturated fatty acids (alpha, beta and Omega), Ketone Bodies,

## **Unit 2 Blood, Lymphatic and Immune System**

4 hrs

- Blood, pH, Hemoglobin, Plasma Proteins (functions)
- Metabolism of Erythrocytes, Leucocytes, Thrombocytes and Reticulocytes
- Blood Coagulation factors and their properties, Anticoagulants and the mechanism of action of oxalate in inhibiting blood coagulation
- Biochemical Basis of Hemorrhagic Diseases

**Unit 3 Musculoskeletal System** 2 hrs

- Role of calcium, phosphorus and Vitamin D in bone formation, hormonal control of calcium and phosphorus metabolism
- Biochemistry of Muscle Contraction

**Unit 4 Nervous System** 2 hrs

- Biochemistry of CSF and CSF analysis
- Neurotransmitters and their Function

**Unit 5 Respiratory system** 1 hr

- Buffers, Acid Base Balance and Disorders

**Unit 6 Cardiovascular System** 2hrs

- Lipoproteins, Their Types and Metabolism
- Cardiac Enzymes and their significance

**Unit 7 Gastrointestinal System** 3 hrs

- Liver Function Tests and Significance
- Bilirubin Metabolism and Detoxification
- Concepts of Malabsorption, Starvation and Obesity

**Unit 8 Urinary System** 3 hrs

- Composition of Urine, Normal and Abnormal Constituents, Urine Examination for Sugar, Protein and Ketone Bodies
- Renal Function Tests, Metabolic Acidosis and Alkalosis
- Introduction to Electrolytes, Osmolarity and Osmolality

**Unit 9 Reproductive System** 1 hr

- Biochemical Aspects of Sex Hormones

**Unit 10 Endocrine System** 3 hrs

- Biochemical Aspects of hormones of different glands (Hormone Classification and Mechanism of Action, Thyroid Hormone Synthesis and Thyroid Function Tests; Functions, Estimation and Interpretation of Glucocorticoids and Mineralocorticoids)



**Teaching Learning Method:**

Lecture

Group work/presentation Individual/ group assignments

**Evaluation**

- Internal assessment:written 30%
- Final Exam: written 70%

## INTEGRATED HEALTH SCIENCES II (Theory)

<b>Course No:BSN2</b>	<b>Placement: First year</b>
<b>Hours: 160</b>	<b>Marks: 100</b>

### Course description

This course will facilitate students in acquisition of fundamental knowledge in integrated health sciences in relation to different systems of the human body focussing on pathology, pharmacology and microbiology. It will enables students to apply this knowledge and skill in providing nursing care to the patients, families and communities in different setting.

### Course contents

#### **PATHOLOGY**

**50 hrs.**

#### **Unit 1 General concepts**

6 hrs

- Introduction to pathology and definition of terms
- Necrosis, Apoptosis: Definition, types and morphology.
- Cell injury: causes and mechanism of cell injury
- Inflammation: acute and chronic: Definition, causes, pathogenesis.
- Haemodynamic disorders: shock, edema, thrombosis, embolism and infarction
- Hypersensitivity reactions/ immunodeficiency diseases( AIDS)
- Neoplasia: definition, nomenclature, differences between benign and malignant tumours

#### **Unit 2 Blood, Lymphatic and Immune System**

4 hrs

- Definition and classification of anaemia
- Iron deficiency aneamia
- Megaloblastic anaemia
- Thrombocytopenia: definition and etiology
- Haemophilia: definition, clinical and lab features
- Leukemia: etiology and classification
- Lymphoma: classification
- Disseminated intravascular coagulation: definition, etiopathogenesis and clinical features

**Unit 3 Musculoskeletal System** 4 hrs

- Rickets/osteomalacia: pathogenesis, clinical features and complications
- Osteomyelitis: pyogenic and tuberculous
- Osteoarthritis: gout
- Osteoporosis: pathogenesis, clinical features and complications
- Myopathy: pathogenesis, clinical features and complications of myasthenia gravis
- Muscular dystrophy: definition
- Classify soft tissue and bone tumours

**Unit 4 Nervous System** 4 hrs

- Hydrocephalus
- Cerebrovascular accident
- Meningitis, encephalitis, poliomyelitis
- Inflammatory neuropathy
- Brain tumor classification, astrocytoma
- Peripheral nerve sheath tumor, schwannoma

**Unit 5 Special Senses and Integumentary System** 5 hrs

- Otitis media
- Conjunctivitis
- Classification of eye tumor: Retinoblastoma
- Dermatitis: definition, types, clinical features (Psoriasis and lichen planus)
- Leprosy : Types, pathogenesis and morphology
- List common fungal and parasitic infections of skin
- Skin tumors: Squamous cell carcinoma and basal cell carcinoma
- Melanocytic tumors of skin: Types of naevi and morphology. Clinical features and morphology of melanoma

**Unit 6 Respiratory System** 3 hrs

- Pathophysiology of upper and lower respiratory tract infection
- Pathophysiology of pneumonia, TB and lung abscess
- Etiopathogenesis of COPD(asthma, bronchitis, emphysema and bronchiectasis)
- Definition of lung collapse, pneumothorax and pleural effusion.
- ARDS and hyaline membrane disease: pathogenesis , clinical features and complications
- List of tumours of lungs

**Unit 7 Cardiovascular System** 4 hrs

- Atherosclerosis: causes, effects and complications

- Pathogenesis of arteriosclerosis, Buerger's disease and aneurysms
- Hypertension: definition, types, pathogenesis and complications
- Pathology of myocardial infarction
- Endocarditis: types, etiopathogenesis of subacute bacterial endocarditis and complications
- Rheumatic heart disease

### **Unit 8 Gastrointestinal System**

6hrs

- Oral pathology: precancerous lesions
- Etiopathogenesis of peptic ulcer, TB abdomen, typhoid.
- Pathology of intestinal obstruction
- Etiology of cirrhosis, hepatitis, cholecystitis, cholelithiasis and pancreatitis
- Patho physiology of carcinoma of stomach, colon and rectum
- Acute appendicitis: pathogenesis, clinical features, complications and morphology

### **Unit 9 Urinary System**

4 hrs

- Nephrotic syndrome. Nephritic syndrome and renal failure.
- Renal calculi and hydronephrosis
- Congenital abnormalities: Polycystic kidney disease.
- Urinary tract infection including pyelonephritis.
- Tumors of kidney and urinary bladder: Renal cell carcinoma, urothelial cell carcinoma.

### **Unit 10 Reproductive System**

4 hrs

- Pelvic inflammatory disease. List sexually transmitted disease.
- Endometriosis, adenomyosis: Definition, pathogenesis and clinical features.
- Ectopic pregnancy: pathogenesis, sites and clinical features.
- Abortion: Definition and types.
- Tumors of ovary: Classification.
- Pathological features of chronic cervicitis, leiomyoma and cancer of cervix.
- Tumors of breast: Classification
- Pathological features of fibroadenoma, fibrocystic disease and infiltrative ductal carcinoma.
- Nodular hyperplasia of prostate.

### **Unit 11 Endocrine System**

6 hrs

- Conditions resulting from abnormal secretion of anterior pituitary hormones: gigantism, acromegaly, dwarfism
- Conditions resulting from abnormal secretions of thyroid hormones hypothyroidism, hyperthyroidism, Grave's disease, goiter, Hashimoto thyroiditis

- List tumours of thyroid gland: explain the microscopic features of papillary carcinoma of thyroid
- Other endocrine related disorders: Cushing syndrome, Addison disease, diabetes mellitus, diabetes insipidus.

## **PHARMACOLOGY**

**70 hrs**

### **Unit 1 General concepts**

**18 hrs**

- Introduction to terminologies and abbreviations used in pharmacology
- Pharmacokinetics : Absorption, distribution, metabolism and excretion of drugs; plasma half-life and steady state concentration
- Pharmacodynamics : Mechanism of action, efficacy, agonist and antagonist
- Different routes of drug administration
- Therapeutic drug monitoring. List their usefulness and limitations
- Factors modifying drug action
- Adverse drug reactions and drug interactions
- Concept to drug dependence, intolerance and resistance
- Outline of Management of Common poisons and their antidotes. Organophosphate, dhatura poisoning, paracetamol, opioid, alcohol etc
- Concepts of vaccines; active and passive immunizations
- Concept of essential drugs
- Rational use of drugs: Definition, examples of rational and irrational use and impact of irrational use of drugs
- General principles of antimicrobial therapy
- Antimicrobial resistance and approaches to reduce AMR
- List of antibiotics, their mechanism of action, adverse reactions and uses of
  - : Beta lactum antibiotics
  - : Fluroquinolones
  - : Macrolides
  - : Aminoglycosides
  - : Tetracyclines etc
- List antivirals. Explain their mechanism of action adverse effects and uses
- List antifungals. Explain their mechanism of action adverse effects and uses
- Describe the general principles of anti-cancer therapy. List their toxicities

### **Unit 2 Blood, Lymphatic and Immune System**

**3 hrs**

- List the drugs used in treatment of iron deficiency anemia and megaloblastic anemia. Describe their mechanism of action. List their uses and adverse drug reactions
- List drugs used in tropical disease: Malaria, Filariasis, Kala-azar. Describe their mechanism of action. List their uses and adverse drug reactions

### **Unit 3 Musculoskeletal System**

**5 hrs**

- List Non-steroidal anti-inflammatory drugs (NSAIDs). Describe the mechanism of action, and list their adverse effects and uses
- List the drugs used in Gout and rheumatoid arthritis. Describe the mechanism of action, and list their adverse effects and uses
- List the drugs used in leprosy. Describe the mechanism of action, and list their adverse effects and uses
- Classify skeletal muscle relaxants. Describe their mechanism of action. List their uses and adverse drug reactions

#### **Unit 4 Neurosensory System**

9 hrs

- Classify cholinergic and anticholinergic drugs. Describe their mechanism of action. List their uses and adverse drug reactions
- Classify adrenergic and antiadrenergic drugs. Describe their mechanism of action. List their uses and adverse drug reactions
- Classify general anesthetics. Describe their mechanism of action. List their uses and adverse drug reactions
- List local anesthetics. Describe their mechanism of action. List their uses and adverse drug reactions
- List opioid agonist and antagonist. Describe their mechanism of action. List their uses and adverse drug reactions
- List anti-epileptics. Describe their mechanism of action. List their uses and adverse drug reactions
- Classify sedative hypnotics Describe their mechanism of action. List their uses and adverse drug reactions
- Classify antidepressants. Describe their mechanism of action. List their uses and adverse drug reactions
- List antipsychotics. Describe their mechanism of action. List their uses and adverse drug reactions

#### **Unit 5 Respiratory System**

5 hrs

- List the drugs used in bronchial asthma. Describe their mechanism of action. List their uses and adverse drug reactions
- List the drugs used in cough. Describe their mechanism of action. List their uses and adverse drug reactions
- List the drugs used in tuberculosis. Describe their mechanism of action. List their uses and adverse drug reactions
- List anti-histamines. Describe their mechanism of action. List their uses and adverse drug reactions

#### **Unit 6 Cardiovascular System**

10 hrs

- List the drugs used in hypertension. Describe their mechanism of action. List their uses and adverse drug reactions
- List the drugs used as anticoagulants and coagulants. Describe their mechanism of action. List their uses and adverse drug reactions

- List thrombolytic. Describe their mechanism of action. List their uses and adverse drug reactions
- List anti-platelets. Describe their mechanism of action. List their u adverse drug reactions
- List the drugs used in arrhythmia. Describe their mechanism of action. List their adverse drug reactions
- List the drugs used in angina pectoris and myocardial infarction. Describe their mechanism of action. List their adverse drug reactions
- List the drugs used in congestive cardiac failure. Describe their mechanism of action. List their adverse drug reactions
- List the drugs used in dyslipidemia. Describe their mechanism of action. List their adverse drug reactions
- List drugs used in cardio-vascular shock

### **Unit 7 Gastro-intestinal System**

6 hrs

- List the drugs used in acid peptic disorders. Describe their mechanism of action. List their uses and adverse drug reactions
- List the drugs used in helminthiasis. Describe their mechanism of action. List their uses and adverse drug reactions
- List the drugs used in amoebiasis and giardiasis. Describe their mechanism of action. List their uses and adverse drug reactions
- List the drugs used in constipation. Describe their mechanism of action. List their uses and adverse drug reactions
- List the drugs used in diarrhea. Describe their mechanism of action. List their uses and adverse drug reactions
- List antispasmodics. Describe their mechanism of action. List their uses and adverse drug reactions

### **Unit 8 Urinary System**

3 hrs

- List urinary antiseptics. Describe their mechanism of action. List their adverse drug reactions
- List diuretics and antidiuretics. Describe their mechanism of action. List their uses and adverse drug reactions

### **Unit 9 Reproductive System**

7 hrs

- List androgens and anabolic steroids. Describe their mechanism of action. List their uses and adverse drug reactions
- List various preparations of estrogens and progesterone. Describe their mechanism of action. List their uses and adverse drug reactions
- List hormonal contraceptives. Describe their mechanism of action. List their uses and adverse drug reactions
- List uterine stimulants (oxytocics). Describe their mechanism of action. List their uses and adverse drug reactions

- List uterine relaxants (tocolytics). Describe their mechanism of action. List their uses and adverse drug reactions
- List the drugs used in STD. List their adverse drug reactions

### **Unit 10 Endocrine System**

4 hrs

- List the drugs used in hyperthyroidism and hypothyroidism. Describe their mechanism of action. List their uses and adverse drug reactions
- List the drugs used in treatment of diabetes mellitus. Describe their mechanism of action. List their uses and adverse drug reactions
- List corticosteroids. Describe their mechanism of action. List their uses and adverse drug reactions

## **MICROBIOLOGY**

**40 hrs**

### **Unit 1 General Concepts**

6 hrs

- Introduction to Microbiology
- Historical development of Microbiology
- Classification of microorganisms: Eukaryotes, Prokaryotes, Bacteria, Viruses, Fungi and Parasites
- Bacteria: Morphology, Bacterial growth and influencing factor, Bacterial spores
- Staining Methods: Gram Stain , AFB stain
- Culture media and Antibiotic susceptibility test
- Sterilization and Disinfection
- Normal Flora
- Hospital Acquired infection and infection prevention and control

### **Unit 2 Blood, Lymphatic and Immune System**

5 hrs

- Immunity and its types
  - Innate immunity
  - Adaptive immunity: Humoral and cell mediated immune response
- Immunodiagnosis of infectious disease: Agglutination, Immunochromatography, ELISA
- Morphology, Lifecycle, pathogenesis, clinical manifestation, laboratory diagnosis and prevention of
  - *Plasmodium*
  - *Leishmania donovani*

### **Unit 3 Musculoskeletal System**

3 hrs



- List of common organisms causing infection of Musculoskeletal System including osteomyelitis, septic arthritis and gas gangrene.
- Collection and transport of specimens for the isolation of organism (aerobic and anaerobic) causing musculoskeletal infection.
- Morphology, pathogenesis, clinical manifestation, laboratory diagnosis and prevention of
  - *Staphylococcus aureus*
  - *Mycobacterium leprae*
  - Herpes viruses

#### **Unit 4 Nervous System**

2 hrs

- Meningitis
  - Definition
  - Pathogens
  - Laboratory diagnosis
- Morphology, pathogenesis, clinical manifestation, laboratory diagnosis and prevention of
  - *Neisseria meningitidis*
- Etiology, pathogenesis, clinical manifestation and laboratory diagnosis of:
  - Polio
  - Rabies
  - Tetanus

#### **Unit 5 Special sensory and Integumentary System**

4 hrs

- Dermatophytosis
  - Etiology
  - Clinical features
  - Laboratory diagnosis
- Conjunctivitis and keratitis
  - List of pathogens
  - Method of sample collection for laboratory diagnosis
- Otitis externa and otitis media
  - List of pathogens
  - Method of sample collection for laboratory diagnosis

#### **Unit 6 Respiratory system**

5 hrs

- Respiratory tract infection : Definition, types, pathogens and collection and transportation of specimen for diagnosis of respiratory tract infection
- Morphology, pathogenesis, clinical manifestation, laboratory diagnosis and prevention of:
  - *Corynebacterium diphtheriae*, *Streptococcus pyogenes*, *Streptococcus pneumoniae*, *Mycobacterium tuberculosis*

- SARS -CoV2

### **Unit 7 Cardiovascular System**

3 hrs

- Bacteremia, septicemia, Infective endocarditis
  - Definition
  - Etiology
  - Laboratory diagnosis

### **Unit 8 Gastrointestinal System**

4 hrs

- List of common organisms causing Diarrhea, Dysentery and Food poisoning
- Morphology, pathogenesis, clinical manifestation, laboratory diagnosis and prevention of
  - *Salmonella, Shigella, Vibrio cholerae*
- Morphology, Lifecycle, pathogenesis, clinical manifestation, laboratory diagnosis and prevention of
  - *Giardia lamblia, Entamoeba histolytica, Ascaris lumbricoides, Ancylostoma duodenale*

### **Unit 9 Urinary System**

2 hrs

- Urinary tract infection
  - Definition
  - Pathogens
  - Laboratory diagnosis
- Morphology, pathogenesis, clinical manifestation, laboratory diagnosis and prevention of
  - *Escherichia coli*

### **Unit 10 Reproductive System**

6 hrs

- Sexually transmitted infection
  - Definition
  - Pathogens
  - Method of sample collection and transportation for laboratory diagnosis
- Morphology, pathogenesis, clinical manifestation, laboratory diagnosis and prevention of
  - *N. gonorrhoeae, Treponema pallidum,*
  - HIV, Hepatitis B
  - *Trichomonas vaginalis*
  - *Candida albicans*

## INTEGRATED HEALTH SCIENCES (PRACTICAL)

<b>Course No: BSN3</b>	<b>Placement: First year</b>
<b>Hours: 126</b>	<b>Marks: 100</b>

### Course description

The Integrated Health Sciences includes lab experiences where student will learn to explore the health sciences relevant to the human body through different laboratory experiences.

The students are posted indifferent labs in the following duration.

Anatomy	Physiology	Biochemistry	Pathology	Pharmacology	Micro-biology	Total Hours
19	27	18	19	15	27	126

### Course Activities and Competencies:

Unit	Learning outcome	Domain K/S/ A/C	Level K/K H/SH /P	Core Y/N	Methods of teaching learning	Method of assessm ent	Minimum requirement of exposure
<b>1.</b>	<b>Anatomy Practical</b>						
1.1	Identification and side determination of bones: clavicle, scapula, humerus, radius, ulna, hip bone, femur, tibia, fibula.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
1.2	Identification of major joints in an articulated skeleton and demonstration of their movements: shoulder joint, hip joint, knee joint, temporomandibular joint, elbow joint, wrist joint, ankle joint.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
1.3	Identification of the bones of skull	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1

1.4	Identification of major muscles, vessels and nerves of upper limb and lower limbs.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
1.5	Identification of visceral organs: brain, spinal cord, trachea and lungs, heart, stomach, small and large intestine, liver, pancreas, kidneys with ureter and urinary bladder, male pelvis, female pelvis.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
1.6	Identification of embryological models:  Fertilized ovum, second week of gestation (blastocyst), third week of gestation, placenta,	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
<b>2.</b>	<b>Physiology Practical</b>						
2.1	Orientation of physiology laboratory: Including equipment and instruments	K/S	K/K H	Y	Demo	OSPE/ Viva	1
2.2	Collection of blood sample: Capillary puncture and venipuncture.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
2.3	Demonstration of erythrocyte sedimentation rate (ESR) and packed cell volume (PCV)	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
2.4	Estimation of haemoglobin using Sahli's and Adams' hemoglobinometer.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
2.5	Blood grouping and cross matching	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
2.6	Calculation of bleeding time (BT) and clotting time (CT)	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1

2.7	Identification of white blood cells under the microscope and differential leucocyte count (DLC).	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
2.8	Examination of motor nervous system: muscle tone, muscle power and coordination.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
2.9	Examination of reflexes: Knee reflex, ankle reflex, biceps reflex, triceps reflexes.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
2.10	Examination of sensory system: fine touch, crude touch, pain and temperature sensation.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
2.11	Examination of cranial nerves: Pupillary light reflex, test for colour blindness.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
2.12	Auscultation of breath sounds.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
2.13	Auscultation of heart sounds.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
2.14	Examination of pulse.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
2.15	Examination of blood pressure.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
<b>3.</b>	<b>Biochemistry Practical</b>						
3.1	Introduction to the Biochemistry Laboratory.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
3.2	Concepts of Dispensing, Volume Transfer, Metrics.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
3.3	Principles of Colorimetry, Spectrophotometry.	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1

3.4	Laboratory analysis concepts: Qualitative Vs Quantitative with examples Instrumental Operation, Lab Equipment.	K/S	KH/SH	Y	Demo	OSPE/ Viva	1
3.5	Laboratory Estimation of Glucose and Interpretation.  Laboratory Estimation of Urea and Interpretation.	K/S	KH/SH	Y	Demo	OSPE/ Viva	1
3.6	Laboratory Estimation of Creatinine and Interpretation.	K/S	KH/SH	Y	Demo	OSPE/ Viva	1
3.7	Laboratory Estimation of Total Protein and Interpretation.	K/S	KH/SH	Y	Demo	OSPE/ Viva	1
3.8	Laboratory Estimation of Albumin and Interpretation.	K/S	KH/SH	Y	Demo	OSPE/ Viva	1
3.9	Laboratory Estimation of Cholesterol and Interpretation.	K/S	KH/SH	Y	Demo	OSPE/ Viva	1
3.10	Laboratory Estimation of Bilirubin and Interpretation.	K/S	KH/SH	Y	Demo	OSPE/ Viva	1
3.11	Laboratory Estimation of Amylase and Interpretation.	K/S	KH/SH	Y	Demo	OSPE/ Viva	1
3.12	Laboratory Estimation of Alkaline Phosphatase and Interpretation.	K/S	KH/SH	Y	Demo	OSPE/ Viva	1
<b>4.</b>	<b>Pathology Practical</b>						
4.1	Caseous necrosis, granuloma, abscess, coagulative necrosis.	K/S	KH	Y	Demo	OSPE/ Viva	1
4.2	Identify the gross and microscopic features of osteomyelitis, osteosarcoma and lipoma.	K/S	KH	Y	Demo	OSPE/ Viva	1
4.3	Identify the gross features of peptic ulcer, cholecystitis,	K/S	KH	Y	Demo	OSPE/ Viva	1

	carcinoma of stomach and colon.  Identify microscopic features of squamous cell carcinoma of oral cavity, adenocarcinomas of stomach and colon, cholecystitis, appendicitis and pleomorphic adenoma.					Viva	
4.4	Identify the gross features of bronchiectasis and carcinoma of lungs.	K/S	KH	Y	Demo	OSPE/ Viva	1
4.5	Identify microscopic features of tuberculosis and carcinoma of lung.	K/S	KH	Y	Demo	OSPE/ Viva	1
4.6	Identify the microscopic features of iron deficiency anaemia, megaloblastic anaemia, reactive lymphadenitis, tubercular lymphadenitis.	K/S	KH	Y	Demo	OSPE/ Viva	1
4.7	Identify microscopic features of atherosclerosis and myocardial infarction.	K/S	KH	Y	Demo	OSPE/ Viva	1
4.8	Identify the gross and microscopic features of goiter and papillary carcinoma of thyroid.	K/S	KH	Y	Demo	OSPE/ Viva	1
4.9	Identify the gross and microscopic features of hydronephrosis, renal cell carcinoma, urothelial carcinoma.	K/S	KH	Y	Demo	OSPE/ Viva	1
4.10	Identify the microscopic features of chronic pyelonephritis.	K/S	KH	Y	Demo	OSPE/ Viva	1
4.11	Identify the gross and microscopic features of fibroadenoma, infiltrating carcinoma. NST, nodular	K/S	KH	Y	Demo	OSPE/ Viva	1

	hyperplasia of prostate and leiomyoma.						
4.12	Identify the microscopic features of astrocytoma and schwannoma.	K/S	KH	Y	Demo	OSPE/ Viva	1
4.13	Identify the microscopic features of retinoblastoma.	K/S	KH	Y	Demo	OSPE/ Viva	1
4.14	Identify the microscopic features of squamous cell carcinoma and basal cell carcinoma.	K/S	KH	Y	Demo	OSPE/ Viva	1
<b>5.</b>	<b>Pharmacology Practical</b>						
5.1	Drug prescriptions: parts of prescription and importance of each part	K/S	KH	Y	Demo	OSPE/ Viva	1
5.2	List of Emergency drugs. List their uses and dosage formulations	K/S	KH	Y	Demo	OSPE/ Viva	1
5.3	Drug dose calculation based on age and weight	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
5.4	Intravenous drug drip calculations	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
5.5	Describe various drug dosage formulations	K/S	KH/ SH	Y	Demo	OSPE/ Viva	1
<b>6.</b>	<b>Microbiology Practical</b>					OSPE/ Viva	
6.1	Code of practice in Microbiology laboratory	K/S	KH	Y	Demo	OSPE/ Viva	1
6.2	Equipment used in Microbiology laboratory	K/S	KH	Y	Demo	OSPE/ Viva	1
6.3	Microscopy	K/S	KH	Y	Demo	OSPE/ Viva	1



6.4	Staining Methods- Gram stain, AFB stain	K/S	KH	Y	Demo	OSPE/ Viva	1
6.5	Culture media and Antibiotic susceptibility test.	K/S	KH	Y	Demo	OSPE/ Viva	1

	infection						
6.14	Collection, transportation and processing of sample for laboratory diagnosis of STI:  <i>N. gonorrhoeae, Candida albicans</i>	K/S	KH	Y	Demo	OSPE/ Viva	1
6.15	Serological diagnosis of HIV, Hepatitis B and Syphilis.	K/S	KH	Y	Demo	OSPE/ Viva	1

Domain: K/S/A/C: knowledge/skill/attitude/communication

Level: K/KH/SH/P: knows/knows how/shows how/performs

**Methods of teaching:** Interactive lecture/Demonstration/Laboratory work/Correlation seminar/ Problem based learning (PBL)/Simulation/Skills lab/Self-directed learning/

Methods of assessment: Short answer question (SAQ)/Modified essay question (MEQ)/Problem based question (PBQ)/multiple choice question (MCQ)/Objective structured practical examination (OSPE)/Objective structured clinical examination (OSCE)/Viva/long case/short case/procedure skill test/communication skill test

**Reference books:**

### Anatomy

1. Ross and Wilson Anatomy and Physiology in Health and Illness: Latest edition
2. Tortora, G.J., & Derrickson, B.H. Tortora's Principles of Anatomy and Physiology (Latest Ed.). Global Edition
3. Richard Drake, Gray's Anatomy for students; latest edition
4. Langman's Medical Embryology; latest edition

### Physiology

1. Ross and Wilson Anatomy and Physiology in Health and Illness: Latest edition
2. Vander's Human Physiology, Eric Widmaier, Hershel Raff, Kevin Strang: Latest edition
3. Comprehensive Textbook of Medical Physiology, G.K Pal: Latest edition
4. Textbook of Pathophysiology, Dr Narayan B Mahotra: Latest edition
5. Textbook of Medical Physiology, Guyton and Hall: Latest edition
6. Textbook of Anatomy and Physiology, Gautam R. and K.C. T. Latest Edition; Samiksha Publication

### Biochemistry

1. Harper's Illustrated Review of Biochemistry, 30<sup>th</sup> Edition, Murray, Granner et. al
2. Lippincott's Illustrated Reviews Series: Biochemistry, Latest Edition

### Pathology

1. Robbin's Basic Pathology, latest edition
2. Dhakal B. Textbook of pathology 1<sup>st</sup> edition, Nirvana Publication, 2022

### **Pharmacology**

1. Barber, P & Roberstson, D. Essentials of pharmacology for nurses, latest edition
2. Lilley, LL, Collins, Rs & Synder SJ. Prharmacology and the nursing process. Latest edition
3. Tripati Kd. Essentials of medical pharmacology. Latest edition

### **Microbiology**

1. Chakraborty P. A textbook of Microbiology. Latest Edition

### **Evaluation**

Internal assessment (50%):OSCE & Viva

Final Exam(50%):OSCE & Viva

## FUNDAMENTALS OF NURSING (Theory)

<b>Course No: BSN 4</b>	<b>Placement: First year</b>
<b>Hours: 150</b>	<b>Marks: 100</b>

### Course Description

This course is designed to help the students to develop understanding of professional history, skills and attitudes. This enables students to meet the basic need of the client with respect to nursing care in hospital and community setting.

### Course Objectives

Upon successful completion of the course, students will be able to the

- Explain the terminology related to foundations of nursing.
- Discuss about the history and scope of nursing.
- Discuss about the Maslow Hierarchy of Needs.
- Explain communication skills in different setting
- Describe the nursing process in providing patient care.
- Perform health assessment and identify the problems, if any.
- Describe the nursing measures to meet the patient/client need.
- Explain the therapeutic roles and responsibilities to enhance quality nursing care.
- Discuss the ethical responsibilities of the nurse.
- Describe the first aid management.
- Administer drugs by different routes.
- Explain about the infection preventive measures.
- Describe the care of dead body.

### Course Contents

#### Unit 1: Introduction to Nurse and Nursing

**3 hours**

- Definition of terms: Nurse, Nursing and profession
- History of nursing: National and International
- Qualities of a good nurse
- Scope and trends in nursing

#### Unit 2: Hospitals

**2 hours**

- Definition of hospital, purpose, types and functions of hospitals
- Hospital units and nursing service departments

#### Unit 3: Maslow's Hierarchy of Needs

**2 hours**

- Physiological needs
- Safety and security needs
- Love and belonging needs

- Self- esteem needs
- Self- actualization needs

**Unit 4: Communication Skills**

**6 hours**

- Definition of communication
- Process of communication
- Types of communication
- Importance of communication
- Barriers of communication
- Techniques for effective communication
- Role of Nurse in communication

**Unit 5: The Nursing Process**

**14 hours**

- Nursing Process and its benefits
  - Steps
- A. Assessment
- Data- Types and sources
  - Methods of data collection (history taking, physical examination)
- B. Nursing Diagnosis (NANDA)
- Types
  - Formulation of Nursing Diagnosis and its error
  - Prioritization of Nursing Diagnosis
  - Difference between Nursing Diagnosis and Medical Diagnosis
- C. Planning
- Nursing Care Plan and its purpose
  - Establishing priorities
  - Establishing goals
  - Preparing nursing care Plan
- D. Implementation
- Implementation process
  - Implementation methods
  - Communicating nursing care
- E. Evaluation
- Evaluation of Goal achievement
  - Reassessment

**Unit 6: Ethical Aspects of Nursing**

**4 hours**

- Terminologies related to ethics
- Clients rights
- International Council for Nurses (ICN), ICN code of nursing ethics
- Nepal Nursing Council and NNC code of ethics
- Nursing Association of Nepal

**Unit 7: Nursing measures to assess clients**

**14 hours**

- A. Vitals signs:

- Body Temperature measurement (oral, Axillary and rectal) conversion, types of thermometer and its uses, types of fever and rigor
  - Pulse and its sites, characteristics, variations and factors affecting pulse; measurement of pulse
  - Respiration and its characteristics, factors affecting respiration, its measurement
  - Blood pressure and its characteristics, factors affecting and measurement of blood pressure
  - Recording and reporting of vital signs

**B. Height, Weight, BMI**

**C. Diagnostic test (Nurses Responsibility)**

- Collection of specimen-urine, stool, sputum, blood, other body fluids, FNAC
- Testing of urine for sugar, albumin, acetone, Specific gravity and reaction.
- Other assessment methods about clients need
- X-ray examination ( plain and contrast)
- Ultrasonography (USG)
- Magnetic resonance imaging (MRI)
- Computerized tomography (CT)
- Endoscopy

**Unit 8: Nursing Measures to Meet the Physical Needs of Client**

**18 hours**

**A. Comfort measures:**

**Bed making (purpose, principles, procedure)**

- Occupied bed, Unoccupied bed, Post operative bed, Orthopedic bed, Striker bed
- Divided bed, Cardiac bed, Cradle bed, Water bed/air bed

**Position:**

- Lateral(Left, Right), Prone, Fowler's/semi fowler's, Lithotomy, Knee Chest
- Trendelenburg, Dorsal recumbent, Sims position

**Body mechanics**

- Concepts and principles of body mechanics, Normal body alignment

**Changing position of the helpless patient from and to;**

- Bed and wheel chair
- Bed and stretcher
- Wheel chair to bed
- Turning the client
  - Log rolling
  - Supine to lateral

**Pressure Sore**

- Common sites, Signs of pressure sore, Grading of pressure sore, Predisposing factors of bed sore. Prevention and care of pressure sore

**Use of comfort devices/ safety measures (principles, uses)**

- Cardiac table, Back rest, Air Cushion, Extra pillow, foot board, side rails, bed lifter, sand bag, cradle, hand rolls, restraints

**B. Personal hygiene**

- Oral care (conscious, unconscious)
- Care of skin(sponge and bed bath)
- Care of hair (hair wash/hair care)



- tepid sponge
- Precautionary measures and nursing responsibilities in hot and cold application

**Unit 13: Therapeutic Measures and Environment** **14 hours**

- Introduction to the care of the sick
- Safety/ comfort measures in the environment
  - Adequate lighting, ventilation and control of noise
- Administration of oxygen
  - Types, purpose, indication of oxygen administration
  - Nursing role and responsibilities during oxygen administrations.
- Steam inhalation/ nebulization
  - Purpose
  - Indication
  - Procedure
- Exercise
  - Posture ,Exercise
  - Range of Motion
  - Active and Passive Exercise
  - Deep Breathing and Coughing Exercise
  - Postural Drainage

**Unit: 14: Drugs Administrations** **15 hours**

- Definition, Terms and abbreviations used when administering drugs AC, PC, OD, BD, TDS, QID, PRN, HS, SOS.
- Route of administration of drugs
- Rules of drug administration
- Types, principles, purposes, procedures of administration of medication (oral, IM, IV, ID, SC, PV,PR,inhalation)
- Instillation of drugs in eyes, ears and nose
- Blood transfusion (procedure, principle)
- Role & responsibilities of a nurse in administering drugs

**Unit 15: Dressing and Bandaging** **8 hours**

- Definition of wound, dressing and bandaging
- Type, purpose, principle and technique of dressing
- Principles, types and techniques of bandaging

**Unit 16: First Aid** **8 hours**

- Definition and principles of first aid
- Emergency conditions and their first aid management
  - Fractures, drowning, choking
  - Snake, insect and dog bites
  - Burns, frost bite, poisoning
  - Foreign body in eye,nose, ear, throat
  - Epistaxis, hemorrhage, shock
- Basic life support (Cardio Pulmonary Resuscitation): purpose, principles and procedure



- Unit 17: Admission and Discharge of patients** **4 hours**
- Admission of patient
  - Discharge of patient
- Unit 18: Pre & Post-Operative Care of Patients** **2 hours**
- Pre-operative nursing care
  - Post-operative nursing care
- Unit 19: Responding to Death and Care of Dead body** **2 hours**
- Care after the death: Cleaning, packing, handover of dead body,
  - Psychological support to the family
  - Bereavement
- Unit 10: Reporting and Recording** **2 hours**
- Concepts, types of records and reports
  - Importance of records and report in Hospital
  - Nurses responsibility in record keeping and reporting

### **Teaching/Learning Activities**

- Lecture and discussion
- Group work
- Individual work
- Demonstration
- Role Play
- Simulation
- Video show

### **Internal assessment: 30%**

**Written test** - 20; written assignment- 10

**Final Evaluation:** Written examination-70%

### **References**

1. Ackley, B. T. & Ladwig, G. B. (2002). Nursing Diagnosis Handbook. St. Louis: Mosby.
2. Augustine, A. Augustine, J. and Chacko, A., (2004). Clinical Nursing Procedure Manual, New Delhi, BI Publication Pvt. Ltd.
3. Basavanthappa, B.T., (2003). Fundamentals of Nursing. New Delhi: Jaypee Brothers.
4. Craven, R.F. and Hirule, C.J. (2000). Fundamentals of Nursing. (3rd edition). Sydney: J.B. Lippincot,

5. Gulanick, M., Klopp, A., Galanes, S., Myers, J. K., Gradisher, D. &Puzas, M. K.(2003). Nursing Care Plans. St. Louis: Mosby.
6. Perry, A. G. & Potter, P. A. (2005). Clinical Nursing Skills and Techniques. St.Louis: Mosby.
7. Kozier, B. and Erb, G. (2000). Fundamentals of Nursing: Concepts and Practice (6th ed). USA: Prentice Hall.
8. Singh (Maharjan), A. Shrestha, K.D,(2017). A text Book of Fundamentals of Nursing. National Centre for Health Professions Education (NCHPE) HLMU.

## FUNDAMENTALS OF NURSING (Practicum)

<b>Course No: BSN 5</b>	<b>Placement: First year</b>
<b>Hours: 672 (16wks)</b>	<b>Marks: 50</b>

### Course Description

This clinical course provides opportunity for students to develop basic skills in nursing and applies knowledge, gained from different basic science subjects in meeting the basic needs of the clients.

### Clinical Objectives:

At the end of the course students will be able to:

1. Relate knowledge from different basic sciences while performing nursing procedures and taking any nursing action.
2. Demonstrate skills in performing basic nursing procedures using nursing process
3. Apply the concept of universal precautions in preventing transmission of infections.
4. Implement different nursing measures to fulfill the physical needs and comfort of the patients
5. Apply skills to provide safety to the patients, positioning & suctioning
6. Apply nursing measures to meet nutritional and elimination needs of the patients
7. 6. Demonstrate skills in simple wound care.
8. 7. Demonstrate the measures for reduce stress
9. 8. Perform different first aid measures for different condition arises as emergency
10. 9. Apply he basic rules in handling and administering drugs.
11. 10. Demonstrate the ability in the care of dead body

### Teaching/ Learning Activities and the competency levels:

Students will carry out the following activities in medical and surgical units under the guidance of the clinical supervisor:

Unit	Learning outcome	Domain K/S/ A/C	Level K/K H/SH /P	Core Y/N	Method of teaching learning	Method of assessm ent	Minimum requireme nt of exposure
1	Bed making (different types of	K/S	KH/	Y	Demo /	OSPE/	10

	beds)		SH/ P		practice in skill lab	Viva	
2	Check vital signs – TPR, BP, height and weight checking	K/S	KH/ SH/ P	Y	Demo / practice	OSPE/ Proced ure/ Viva	10
3	Procedures of personal hygiene: Sponge bath, mouth care, back care, nail care, hair care for	K/S	KH/ SH/ P	Y	Demo / practice	OSPE/ Proced ure/ Viva	5 patients each
4	Admission /discharge procedure	K/S	KH/ SH/ P	Y	Demo / practice	OSPE/ Proced ure/ Viva	5 patients each ward
5	Carrying infection control measures as appropriate including hand washing	K/S	KH/ SH/ P	Y	Demo / practice	OSPE/ Proced ure/ Viva	5
6	Hot and cold application	K/S	KH/ SH/ P	Y	Demo / practice	OSPE/ Proced ure/ Viva	2 patients
7	Collection, labeling and dispatching the specimen.	K/S	KH/ SH/ P	Y	Demo / practice	OSPE/ Proced ure/ Viva	5 patients
8	Use of different types of disinfecting and sterilization.	K/S	KH/ SH/ P	Y	Demo / practice	OSPE/ Proced ure/ Viva	5
9	Positioning and suctioning the patients	K/S	KH/ SH/ P	Y	Demo / practice	OSPE/ Proced ure/ Viva	5

						Viva	
10	History taking and physical examination of patients and nursing care plans	K/S	KH/ SH/ P	Y	Bedside	Case/ OSPE/ Viva	5 patients
11	Daily routine care to the assigned patients	K/S	KH/ SH	Y	Bedside Demo	OSPE/ Viva	2
12	Maintain intake and output charts	K/S	SH/ P	Y	Skill lab/ bedside	OSPE/ Viva	5 patients
13	Nasogastric tube feeding	K/S	KH/ SH	Y	Skill lab/ bedside	OSPE/ Viva	2 patients
14	Enema	K/S	KH/ SH	Y	Skill lab/ bedside	OSPE/ Viva	2 patients
15	Catheterization and care	K/S	KH/ SH	Y	Skill lab/ bedside	OSPE/ Viva	2 patients
16	Active as well as passive exercises	K/S	KH/ SH/ P	Y	Skill lab/ bedside	OSPE/ Viva	5 patients
17	Medication- oral, topical	K/S	KH/ SH/ P	Y	Skill lab/ bedside	OSPE/ Viva	15
18	Giving IM, IV and SC injections	K/S	KH/ SH/ P	Y	Skill lab/ bedside	OSPE/ Viva	15 each
19	Care of clients with IV fluid infusion	K/S	KH/ SH/ P	Y	Skill lab/ bedside	OSPE/ Viva	10
20	Simple wound care	K/S	KH/ SH/	Y	Skill lab/	OSPE/ Viva	5

			P		bedside		
21	Providing preoperative & postoperative care of patients undergoing surgery	K/S	KH/ SH/ P	Y	Skill lab/ bedside	OSPE/ Viva	5
22	Dressing /bandaging	K/S	KH/ SH/ P	Y	Skill lab/ bedside	OSPE/ Viva	5 patients
23	CPR	K/S	KH/ SH	Y	Skill lab	OSPE/ Viva	2
24	First-aid treatment	K/S	KH/ SH	Y	Skill lab	OSPE/ Viva	2 patients
25	Care of dead bodies	K/S	KH/ SH	Y	Bedside	Viva	2

**Internal Assessment (30% marks)**

- Clinical performance (rating scale)
- Nursing procedures (using checklists)
- Procedure log book
- Nursing care plan
- Health teaching
- Procedure log book

**Final assessment (70% marks)**

- Practical examination Practical 50 marks (OSPE and OSCE)
- Oral/viva 20 marks

## COMMUNITY HEALTH NURSING I (Theory)

<b>Course No. BSN 6</b>	<b>Placement: First Year</b>
<b>Hours: 100</b>	<b>Marks: 100</b>

### Course Description

This course is designed to provide the basic knowledge in relation to concepts of health, primary health care, home visiting, environmental health and sanitation and also the concepts of epidemiological approaches, in order to apply these knowledge in clinical field practice.

### Course Objectives:

At the end of the course, students will be able to:

1. Describe the historical development of community health and community health nursing national and international level.
2. Explain the concept of health.
3. Describe the concepts, principles and application of primary health care in Nepalese context.
4. Explain the process and principles of effective communication.
5. Discuss the methods and media of health education for target groups.
6. Explain the importance of environmental sanitation and its impact on health and well-being.
7. Explain the responsibilities of community health nurse regarding different aspects of environmental sanitation in promotion of health.
8. Explain the different types of environmental health hazards.
9. Discuss about housing and its effect on health.

### Course Contents

#### Unit 1: Introduction to community health nursing

**3hours**

- Definition of community, community health and community health nursing.
- Historical development of community health and community health nursing
  - National level
  - International level
- Institutional versus community health nursing
- Role and responsibility of community health nurse

#### Unit 2: Concept of Health

**4 hours**

- Definition of health (WHO) and optimum health
- Changing concept of health
  - Biomedical concept

- Ecological concept
- Psychological Concept
- Holistic concept
- Spectrum of Health
- Determinants of health
- Responsibility for health
  - Individual/family responsibility
  - Community responsibility
  - National and international responsibility

**Unit 3: Primary Health Care**

**7hours**

- Historical perspective of primary health care:
  - The Alma Ata declaration,
  - Health for all by 2000,
- Definition, **elements and principles** of primary health care
- Primary health care approach in current health plan
- Revitalization of Primary Health Care
- Roles and responsibilities of nurses in primary health care

**Unit 4: Communication**

**3hours**

- Meaning/definition, purpose and types of communication
- Elements
- Communication process
- Barriers and measures of overcoming them
- Principles of effective communication
- Interview: Aims, kinds and technique

**Unit 5: Health education (Overview)**

**5hours**

- Definition
- Principles
- Planning health education: Lesson Plan
- Methods of health education: Lecture, Discussion, Role-play, Demonstration
- Media of health education: Flash cards, Poster, Flip chart, Puppets

**Unit 6: Home visiting**

**6hours**

- Introduction, principles, advantages and purposes of home visiting
- Steps and important of home visiting
- Maintenance of home visiting bag



<b>Unit 7: Community Diagnosis</b>	<b>8hours</b>
<ul style="list-style-type: none"> <li>• Definition, purposes and components of community diagnosis</li> <li>• Process of community diagnosis</li> <li>• Analysis and interpretation of findings</li> <li>• Conducting health action based on findings</li> </ul>	
<b>Unit 8: Environmental Sanitation</b>	<b>6 hours</b>
<ul style="list-style-type: none"> <li>• Definition and components of environment</li> <li>• Meaning of environmental pollution and its sources</li> <li>• Effects of environmental pollution on health</li> <li>• Role and responsibility of people on maintaining environment sanitation</li> </ul>	
<b>Unit 9: Water</b>	<b>6hours</b>
<ul style="list-style-type: none"> <li>• Definition of safe and wholesome water</li> <li>• Uses of water and its requirement</li> <li>• Sources of water supply and its impurities</li> <li>• Purification of water in small scale and large scale</li> <li>• Water borne diseases</li> <li>• Hardness of water: Meaning, disadvantages and its treatment procedures</li> </ul>	
<b>Unit 10: Air Pollution</b>	<b>3 hours</b>
<ul style="list-style-type: none"> <li>• Meaning and sources of air pollution</li> <li>• Prevention and control of air pollution</li> <li>• Effects of air pollution</li> </ul>	
<b>Unit 11: Noise</b>	<b>3hours</b>
<ul style="list-style-type: none"> <li>• Meaning, sources and properties of noise</li> <li>• Effects of noise exposure to human health <ul style="list-style-type: none"> <li>○ Auditory effects</li> <li>○ Non-auditory effects</li> </ul> </li> </ul>	
<b>Unit 12: Land Pollution</b>	<b>3hours</b>
<ul style="list-style-type: none"> <li>• Meaning and source of land pollution</li> <li>• Effects of land pollution</li> <li>• Prevention and control/ management of land pollution</li> </ul>	
<b>Unit 13: Refuse Disposal</b>	<b>6 hours</b>
<ul style="list-style-type: none"> <li>• Meaning and sources of refuse</li> <li>• Methods of refuse disposal</li> </ul>	

- Dumping
- Sanitary landfill
- Composting
- Burning/Incineration
- Burial
- Earthworm/Vermi-composting
- Manure pits
- Health hazards of solid wastes

#### **Unit 14: Human Excreta Disposal**

**6hours**

- Public health importance
- Health hazards of improper disposal of human excreta
- Transmission of faecal-borne diseases and sanitation barrier
- Methods of disposal of excreta
  - Service type
  - Non-service type
    - Bore hole latrine
    - Dug well latrine (Pit latrine)
    - Water sealed latrine

#### **Unit 15: Sewage Disposal**

**6hours**

- Meaning and health hazards of improper sewage disposal
- Methods of sewage disposal
  - Primary treatment
    - Screening
    - Grit chamber
    - Primary sedimentation
  - Secondary treatment
    - Trickling filter method
    - Activated sludge method
  - Other methods
    - Sea outfall
    - River outfall
    - Land treatment
    - Oxidation ponds

#### **Unit 16: Housing**

**5 hours**

- Meaning and its basic criteria and needs of healthful housing
- Standards of housing
- Effects of poor housing on human health

**Unit 17: Epidemiology****8 hours**

- Commonly used terms in epidemiology: Infection, contamination, communicable and non-communicable diseases, epidemiology, epidemic, endemic, pandemic, sporadic, eradication, elimination, virulence, surveillance
- Aims and uses of epidemiology
- Epidemiological approach
  - Asking questions
  - Making comparison
- Concept of disease causation
  - Germ Theory
  - Epidemiological Triad
  - Web of disease causation
  - Natural History of Disease
  - Iceberg of disease phenomenon
- Concept of Disease prevention and control
  - Controlling the reservoir
  - The interruption of transmission
  - The susceptible host
- Levels of disease prevention and modes of intervention

**Unit 18: Epidemiological investigation****4 hours**

- Introduction and objectives of an epidemic investigation
- Steps of epidemic investigation
- Epidemiology of communicable diseases (tuberculosis, HIV/AIDS, Water Borne Diseases)
- Epidemiology of non-communicable diseases (hypertension, diabetes, cancer, CAD)
- Epidemiology of emerging and reemerging diseases

**Unit 19: Family Planning (Overview)****2hours**

- Meaning of family planning
- Types/methods
- Advantages/disadvantages
- Family planning services available in Nepal

**Unit20: Immunization (Overview)****2 hours**

- Immunity (Review)
- National Immunization Program of Nepal including updated schedule, indications, contraindications and health teaching

**Unit 21: Occupational Health****4 hours**

- Definition of occupational health (Ergonomics)
- Occupational hazards
- Occupational diseases
- Prevention of occupational health hazards (Medical measures, Engineering measures and Legislation)
- Role of Nurse in occupational health in industries and work place

### **Teaching/Learning Activities**

- Lecture and discussion
- Small group work and presentation
- Brain storming

### **Internal Assessment Methods 30%**

- Written test 20
- Written assignments 10

**Final Examination:** Written test 70%

### **References**

1. Basavanthappa, B.T. Community Health Nursing, New Delhi: Jaypee Brothers Medical Publishers Pvt. Ltd. Latest edition.
2. Beaglehole, Bonita and Kjeustrom. (1993). Basic Epidemiology. WHO, Geneva.
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5. Clement, I. (2012). Manual of community health nursing. 1st Ed. New Delhi: Jaypee Brothers Medical Publishers.
6. MaCusker, J (1978). Epidemiology in Community Health. Kenya: African Medical and Research Foundation.
7. Mckenzie, J.F, Pinger R.R &Kotecki. An Introduction to Community Health.(4<sup>th</sup> ed). Jones and Barlett Publishers, USA. Latest edition.
8. Park, K. A Textbook of Preventive and Social Medicine. 18<sup>th</sup> edition. Banarsidas, Bharat, India. latest edition
9. Pradhan, H.,. A text book of health education: Philosophy and Principles. 4th ed. Jamal, Kathmandu: Educational Publishing House. Latest edition.
10. World Health Organization. Reproductive Health. (2007). Family planning: a global handbook for providers: evidence-based guidance developed through worldwide collaboration. Johns Hopkins Ccp-Info.
11. World Health Organization. (2021). Immunization training resources. Available at: <https://www.who.int/immunization/documents/training/en/>.

## COMMUNITY HEALTH NURSING I (Practicum)

<b>Course No.: BSN 7</b>	<b>Placement: First Year</b>
<b>Hours: 252 9(6 wks)</b>	<b>Marks: 100</b>

### Course Description:

This course will provide opportunity to the students to carry out community diagnosis in the assigned area and conduct one community level health action by using epidemiological approaches in order to promote the health status of individual, family and group. This course also provides experiences to the student about the various local institutions where nurses care for people.

### Course Objectives:

At the end of the course, students will be able to:

1. Find out the services provided by the selected health related institution through observation visits.
2. Carry out community diagnosis in the assigned community.
3. Communicate effectively with all concerned in providing client-centered care.
4. Prepare a list of the existing facilities in the community concerning environmental sanitation.
5. Apply the epidemiological approaches in solving the identified problems.
6. Carry out the responsibilities of a community health nurse in the health promotion of community people through environmental sanitation.
7. Provide health education to individual, families and communities including immunization, family planning, antenatal, postnatal and newborn care.

### Teaching/Learning Activities

Unit	Learning outcome	Domain K/S/ A/C	Level K/K H/SH /P	Core Y/N	Methods of teaching learning	Method of assessment	Minimum requirement of exposure
1.	Field visit to different local institutions for writing group report about the activities of each institution.				observational	Report writing/ Viva	2 weeks

1.1	Water treatment plant	K/S	KH/ SH	Y	Observation	Report writing/ Viva	1
1.2	Factory (brick/cement/iron/metal)	K/S	K/K H	Y	Observation	Report writing/ Viva	1
1.3	Municipality office/dumping site	K/S	K/K H	Y	Observation	Report writing/ Viva	1
1.4	Sewage disposal plant	K/S	K/K H	Y	Observation	Report writing/ Viva	1
1.5	Epidemiology division, MOH.	K/S	K/K H	Y	Observation	Report writing/ Viva	1
2.	Posting to concurrent field practice for in a rural community for community diagnosis and community action.	K/S	K/K H	Y	Observation	Report writing/ Viva	4 weeks
3.	Seminar presentation/ participation during clinical field practice	K/S	K/K H	Y	Participatory	Report writing/ Viva	Once a week

### Internal Assessment (30%)

- Report submission and presentation of observation visit –10marks
- Report submission and presentation of findings of community diagnosis in group 20
- Provide formal health teaching to the needy family – 5 marks
- Health action by using epidemiological approach (group assignment) – 15marks
- Provide home based care to needy families using family care plan – 2x2.5 = 5
- Community Performance – 15 marks (deducted 5 marks)
- Log book – 5 marks

### Final Examination (70%): Viva voce / OSPE

## NUTRITION AND DIETETICS (THEORY)

<b>Course No: BSN 8</b>	<b>Placement: First year</b>
<b>Hours: 75</b>	<b>Marks: 50</b>

### Course Description

This course is designed to provide essential knowledge and skills on food, diet and nutrition. The course enhances the knowledge and skills related to nutritional assessment, balanced and therapeutic diet.

### Course Objectives:

At the end of the course student will be able to:

1. State the importance of nutrition in health.
2. Describe the different nutrients required by the body including their sources and functions.
3. Describe the features of deficiency of different nutrients, its prevention and management.
4. Describe the national nutrition programs in Nepal.
5. State the nutritive values of common food items.
6. Assist individuals and families in planning a meal according to the need of the family.
7. Suggest the methods of preservation of food safety.
8. Identify the effects of additives and chemicals in food
9. Describe the purpose and use of special diets in health and illness.

### Course Contents

#### Unit 1: Introduction

**5 hours**

- Meaning of food, nutrition and dietetics
- Relationship of nutrition with health: Growth and development, prevention of malnutrition, maintenance of health and resistance to infections.

#### Unit 2: Nutrients

**14 hours**

- Carbohydrate: Classification, chemical composition, digestion and absorption, functions, sources, requirement, deficiencies and excess
- Fats: Classification, chemical composition, digestion and absorption, functions, sources, requirement, deficiency and excess
- Protein: Classification, chemical composition, digestion and absorption, functions, sources, requirement, deficiency and excess

- Vitamins: Characteristics, classification, chemical composition, digestion and absorption, functions, sources, requirement, deficiency and excess
- Minerals: Functions, sources, requirement, deficiency and excess
- Water: Functions, sources and deficiencies

**Unit 3: Nutritional Deficiency Conditions (including their causes, signs and symptoms, prevention and management) 12 hours**

- Protein-energy malnutrition
- Vitamin deficiencies: Vitamin A, B, C, D E and K deficiency
- Mineral deficiencies: Iron, iodine and calcium deficiency

**Unit 4: Nutritional Assessment 5hours**

- Nutritional assessment of under 3 years children
- Nutritional assessment of above 3 years children
- Nutritional assessment of older adult

**Unit 5: Nutritional Requirements and Programs 11 hours**

- Nutritional requirements during different life periods
  - Pregnancy and lactation
  - Infancy and childhood
  - Adolescence
  - Adulthood and
  - Elderly adulthood periods
- National programs on nutrition
  - Supplementation of iodine: Iodized salt
  - Vitamin A supplementation and treatment protocols
  - Iron prophylaxis
  - Growth monitoring
  - Deworming program

**Unit 6: Meal Planning and Preparation 16 hours**

- Food groups:
  - Plant group: Cereals, pulses, vegetables and fruits
  - Animal group: Egg, meat, ghee and milk
- Nutritive value of common food
- Balanced diet: definition, purpose and components



- Meal planning:
  - Factors to be considered in meal planning
    - Colour, shape, texture and flavour
    - Satiety value
    - Socio-cultural preferences: custom, religious beliefs etc.
  - Personal preferences
  - Availability of food
  - Nutritive value of food and
  - Cost
  - Food fads
- Meal patterns
- Preparation of food: Purpose and methods: moist heating, dry heating, frying, pressure cooking, microwave cooking and solar cooking (Practice in community /Nutrition lab)
- Food serving: Preparation of patient and serving of meal
- Preservation of nutritive value in food
- Food enrichment and food fortification
  
- Storage of food
  - Purpose
  - Methods: cold storage, freezing, smoking, salting, canning,
  - irradiation
  
- Food safety
  - Food contamination and its effect on health
  - Food hygiene and safe food practices in cooking, handling and
  - storing
  - Pasteurization

## **Unit 7: Special Diet**

**12 hours**

- Meaning and purpose of special diet
- Types of special diet and their role in health
  - Full diet/ soft diet/ light diet/ liquid diet
  - High calorie/ low calorie diet
  - High protein/ low protein diet
  - Salt restricted/ salt free diet
  - High residue/ low residue diet
  - Bland diet
  - Fat free diet
- Special methods of feeding: tube feeding, IV infusion (review)

## TEACHING LEARNING ACTIVITIES

### Methods:

- Interactive Lecture/Discussion/Demonstration/ Redemonstration
- Role play/ Individual and Group work/presentation / exhibition,

### Medias:

- White board/LCD/Real articles/charts/models/poster/video/ project work
- observation of hospital dietary department

**Assessment/Evaluation Methods:** 30% (Food exhibition-5 and written test- 10)

**Final Examination: 70%** (Written examination 35)

### References

1. Adhikari, R. K. & Krantz, M.E. (2001). Child Nutrition and Health. Kathmandu: HLMC.
2. Antia, F. P., & Abraham, P. (1998). Clinical Dietetics and Nutrition. Calcutta: OxfordUniversity Press.
3. Gibney, M., Michael, J., Macdonald, I. A. and Roche, H. M. (2004). Nutrition and Metabolism. UK: Blackwell Science.
4. Gibney, M., Vorster, H and Kok, F. J. (2002). Introduction to Human Nutrition. Australia: Blackwell Science.
5. Gopalan, C., Sastri, B. V. R. & Balasubramanian, S. C. (1999) Nutritive Value of Indian, Foods. Hyderabad: National Institute of Nutrition.
6. Indrani, T. K. (2003). Nursing Manual of Nutrition and Therapeutic Diet. New Delhi: Jaypee Brothers.
7. Joshi, S. A. (1999). Nutrition and Dietetics. Now Delhi: Tata McGraw-Hill Publishing Co.
8. King, F. S., & Burgess, A. (2000). Nutrition for Developing Countries. New York: Oxford University Press.
9. Park's Text Book of Preventive and Social Medicine.
10. Codex alimentations commission
11. [www.who.int](http://www.who.int)
12. [www.fao.org](http://www.fao.org)
13. [Sangita Sharma](#) . [Tony Sheehy](#) , [Fariba Kolahdo](#). Nutrition at a Glance. 2015. Wiley-Blackwell
14. Alpers, D. H.; Stenson, W. F., Taylor, B. E., Bier , D. M. (2008). Mannual of Nutritional Therapeutics. Lippincot Willians and Wilkins Phildelphia, USA.
15. Bharati, M.; Mehta, R. K. (2014). Nutrition and Dietary Management. Medhavi Publication.

## **B.Sc. NURSING SECOND YEAR COURSE**

BSN9 Community Health Nursing II (Theory)

BSN10 Community Health Nursing II (Practical)

BSN11 Adult Medical Nursing (Theory)

BSN12 Adult Medical Nursing (Practical)

BSN13 Adult Surgical Nursing (Theory)

BSN14 Adult Surgical Nursing (Practical)

BSN15 Geriatric Nursing (Theory)

BSN16 Geriatric Nursing (Practical)

BSN17 Nursing Concepts (Theory)

BSN18 Social & Behavioral Science (Theory)

## OVERVIEW OF B.SC NURSING SECOND YEAR

Code No	Name of the Courses	Total Hours	Marks
BSN9	Community Health Nursing II (T)	100	100
BSN10	Community Health Nursing II (P)	210(5wks)	100
BSN11	Adult Medical Nursing (T)	150	100
BSN12	Adult Medical Nursing (P)	462 (11wks)	100
BSN13	Adult Surgical Nursing (T)	150	100
BSN14	Adult Surgical Nursing (P)	294(7wks)	100
BSN15	Geriatric Nursing (T)	50	50
BSN16	Geriatric Nursing (P)	126 (3wks)	50
BSN17	Nursing Concepts and Theories (T)	75	50
BSN18	Social & Behavioral Science (T)	50	50
	<b>Total</b>	<b>Th= 575 hrs</b> <b>Cl= 1092hrs</b> <b>Total 1667hrs</b>	<b>800</b>

## Mode of Assessment

Subject	Mode of Assessment						
	Theory			Practical			Grand total marks
	Internal Assessment	Final Assessment	Total Marks	Internal Assessment	Final Assessment	Total Marks	
Community Health Nursing II	30	70	100	50	50	100	200
Adult Medical Nursing	30	70	100	50	50	100	200
Adult Surgical Nursing	30	70	100	50	50	100	200
Geriatric Nursing	15	35	50	25	25	50	100
Nursing Concepts	15	35	50	-	-	-	50
Social & Behavioral Science	15	35	50	-	-	-	50

## COMMUNITY HEALTH NURSING II (THEORY)

<b>Course No: BSN 9</b>	<b>Placement: Second Year</b>
<b>Hour: 100</b>	<b>Marks: 100</b>

### Course description

This course is designed to provide comprehensive knowledge in relation to the concept and principles of national and international health care system and community health nursing. It is focused on national health policy, plan and program. This course also focuses on the ways community development programs are executed, emergency measures, school and occupational health.

### Course objectives

- Describe global health with its determinants, current health issues and concept of burden of disease
- Explain the components and utility of community resources
- Explain health care delivery system of Nepal
- Describe community development programme
- Discuss national health planning & policy
- Describe school health programme and its components
- Explain the prevention of occupational health hazards safety measures Explain the process of community participation
- Describe regarding community development in health

### Course contents

#### **Unit 1: global health** **4 hrs**

- Introduction, Health Transition, determinants, Current global health issues
- Concept of Double/Triple burden of diseases
- Role of Nurses in Global health

#### **Unit 2: community resources** **4 hrs**

- Components and utility of community resources
- Multilateral partners: UNFPA, WHO, World Bank, UNICEF

- Bilateral partners: USAID, DFID, JICA, GTZ
- Role of INGOs and NGOs for health promotion

**Unit 3: community participation**

**12 hrs**

- Introduction, definition, purpose
- Concept of community participation
  - Cheap labor concept
  - Cost Sharing concept
  - Contractual obligation
  - Community Decision Making
- Principle of community Participation
- Types of community Participation
  - Medical approach: passive participation, providing information
  - Health service approach: providing incentive, functional participation
  - Health insurance: individual, family and organization
  - Community development approach: consultation participation, Interactive participation and Self-mobilization participation
- Approach of community Participation:
  - Participatory rural appraisal (PRA)
  - Rural Rapid Appraisal (RRA)
  - Participatory learning appraisal (PLA)
  - Community involvement in problem identification, planning, implementation and evaluation
- Barrier / obstacle of in community participation
- Role and responsibility of CHN in Community participation.

**Unit 4: community development and health**

**12 hours**

- Definition, concept, goals and process of community Development
- Techniques of community development: external agent, multiple agent, internal resources mobilization techniques
- Community Development Activities in Nepal: National and local levels
- Integrated Developmental activities
- Urban, Rural and local developmental activities
- Mobilization of local resources
- Community Development Programs
  - Formal and informal Education
  - School health Program
  - Health Education program
  - Advocacy on health-related activities

- Income generation activities
- Social security activities
- Development programs for specific population group within the community: women, children rights and program, elderly people
- Gender equality and women empowerment
- Poverty reduction

**Unit 5: integrated family planning service centers**

**4hrs**

- Maternal and Child Health (MCH)
  - Definition and purpose of MCH
  - Indicators
  - Components of MCH Package
  - MCH Problems: Malnutrition, Uncontrolled Reproduction

**Unit 6: sexual and reproductive health**

**8hrs**

- Review reproductive system including physiology of menstruation
- Concept of sexual and reproductive health: History, Trends, global and local perspectives
- Components of sexual and reproductive health
- Sexual and Reproductive health care policy and strategies
- Sexual and Reproductive Health Rights (WHO/ICPD)
- Male Participation in Sexual and Reproductive Health
- Pillars of SRH (healthy lifestyle during pregnancy, social support from the husband or other family members, adequate knowledge and skills of the nurse-midwives, and the nurse-midwives' professional behaviour)

**Unit 7: nutrition and health**

**8 hrs**

- Terminology: nutrient and nutrition, balanced diet, weaning, Food adulteration, food fortification, food additives
- Classification and sources of food
- Function of food
- Nutritional requirement for different age group and health condition
- Food hygiene and sanitation
- Factors affecting nutrients and nutritional status:
  - Social factors
  - Cultural factors
  - Psychological factors
  - Economical factor
  - Food availability



- Education
  - Milk hygiene and pasteurization
  - Nutritional problems its prevention and management

### **Unit 8: national health plans, policies and programs**

**8hrs**

- Second long term health plan, 1997-2017 current
- National health policy 2071B.S (Revised National Health Policy)
- Sustainable development goals
- Interim plans
- National Urban Health Policy 2010
- National Health Programs
  - National nutrition programme
  - National safe motherhood program
  - FCHV Program
  - PHC- ORC
  - National TB control program
  - National falaria control program
  - National Kalazar/malaria control program
  - National AIDS and STD control program

### **Unit 9: health care system of nepal**

**8hrs**

- Organizational structure in health sector
  - define health care system
  - state goals, purposes and barriers to health care system in Nepal
- Explain history of health care system in Nepal
  - Existing health care delivery system of Nepal
  - Organogram of each level of health care services
  - Functions
  - Staffing pattern and services
  - Revised National health policy (Repeat)
- Management information in health sector
  - Introduction
  - Benefits
  - Types of MIS (Management Information System)
  - Integrated HMIS (Health Management Information System)
  - Tools of HMIS (Health Management Information System)

**Unit 10: gender based violence** **2 hrs**

- Concept of gender based violence
- Gender based violence and its impact on health
  - Social and community factors influencing violence
  - Role and responsibilities of nurses in violence's and gender issues

**Unit 11: school health program** **8 hrs**

- Definition, concepts, objectives and importance of school health program
- Aspects /Components of School Health Program
  - Health promotive & protection services
  - Therapeutic services
  - Rehabilitative services
  - School health records
- Common Health problems of school children
- School health team
- Roles and responsibilities of school health nurse
- High risk school children & parents counseling programme
- Target groups involved in school health care services
- Planning, implementation & evaluation of school health programme

**Unit 12: occupational health** **10 hrs**

- Definition, aims & objectives of occupational health
- Occupational environment- physical, social, mental
- Occupational hazards- Physical, Chemical, Biological, Mechanical, Psychosocial
- Measures for health protection of workers
  - Nutrition
  - Communicable disease control
  - Environmental sanitation
  - Mental health
  - Measures for women & children
  - Health education
- Prevention of occupational diseases
  - Medical measures
  - Engineering measures
  - Legislation measures
- Factory Act
- Benefits to employees
- Role of community health nurse in occupational health.

### **Unit 13: community based rehabilitation (cbr)**

**4 hrs**

- Introduction and concept of CBR
- Types of disabilities
- Types of Rehabilitation
  - Social support
  - Economical support
  - Emotional support
  - Medical support
  - Vocational\occupational training
  - life skill training
- Role and responsibilities of Nurse in different rehabilitation centers

### **Unit 14: community crisis and disaster management**

**8 hrs**

- Concept of crisis and its management
- Meaning and types of disaster
- Consequences of Disaster and its management
- The process of disaster planning
- Preparedness' a community disaster plan
- Role and responsibility of community health nurse in disaster management
- Role of Epi-Nurse (epidemiological nurse) in Disaster Risk Reduction (DRR)

### **Teaching/Learning strategies**

- Interactive lecture and discussion
- Brain storming/ Group work and presentation
- Role play/ Demonstration/ Video show
- Simulation/SDL

## **COMMUNITY HEALTH NURSING - II (PRACTICAL)**

<b>Course No: BSN 10</b>	<b>Placement: Second Year</b>
<b>Hour: 210</b>	<b>Marks: 100</b>

### **Course Description**

This course provides the students opportunities to apply the concepts of community diagnosis, school health program, health system of Nepal and disaster management of community health. This course helps students to identify community health problems and manage accordingly through community participation using different approaches in coordination with community resources in order to improve the health status of community People. The student also has assigned in FP/MCH clinic to gain competency in this field

### **Course Objectives**

Upon completion of this course, the students will be able to:

- Participate in community activities in the provision of preventive, promotive, curative and rehabilitative care to the mother, neonate and children including school children.
- Participate in community level health activities in field areas health institution.
- Participate in various community developmental activities and disaster preparedness plan and programs.
- Provide planned health education to individual/ client/FCHV/mothers group or key people of community.
- Identify the available resources and utilize them effectively while performing the tasks.
- Participate in FP/MCH clinic.
- Conduct School Health Services/Program.
- Conduct meeting with health personnel, community leader, focal person maintaining good personal relationship
- Manage health sector in the community (health post etc)

### **Field activities**

Students will be posted in selected health post, School Health (1 week) and Occupational/FP/MCH (1 week) setting in residential community practicum for 3 weeks.

- Management of health post/FP/MCH
- School health program
  - Screening of health
  - Provide need base intervention on identified high risk group
- Health teaching on occupational hazards

### **Evaluation**

- Internal Assessment (50 Marks)

- Management of the health sector in the community 5
- Clinical Performance 5
- One need based activity in the defined school 5
- Health teachings on occupational hazards 5

### **Residential field visit**

- Field performance 10
- Working with local health care service 5
- School health programme 5
- Health exhibition / action 5
- Log book 5
- Final Examination
  - Viva voice

### **Textbooks**

- Park, K. (2015). *Park's Textbook of Preventive and Social Medicine*. (23<sup>rd</sup> edition). Jabalpur: Banarsidas Bhanot Publishers
- Gulani K.K. (2012). *Community health Nursing: Principles & Practices*. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd.

### **References**

- Stanhope M. Lancaster J. *Community Health Nursing: Process and Practice for Promoting Health*, 8<sup>th</sup> ed. Mosby year book, 1996
- Annual Report, Dept. of Health Service, Government of Nepal, latest
- Dahal R A. *A textbook of Health Management. Health Management in Nepalese Perspective*. Vidyarthi Pustak Bhandar. 2012
- Thapa S. *Diagnosis and Development of Community Health: Organizing Empowerment Raising Awareness*. Taleju Prakashan. 2009
- Kamalam S., *Essentials in Community Health Nursing Practice*, Jaypee Publications, New Delhi, 2005
- Basavanthappa BT., *Community Health Nursing*, Jaypee Brothers Medical Publication, New Delhi. 1999
- Mahajan, B.K & Gupta M.C. (2012). *Textbook of preventive and social medicine*. (2<sup>nd</sup> edition). New Delhi: Jaypee Brothers, Medical Publishers (P) Ltd
- Clement, I. (2009). *Basic Concepts of Community Health Nursing* (2<sup>nd</sup> ed.). New Delhi: Jaypee Brothers Medical Publishers Pvt. Ltd.

## ADULT MEDICAL NURSING (THEORY)

<b>Course No: BSN 11</b>	<b>Placement: Second Year</b>
<b>Hour: 150</b>	<b>Total mark: 100</b>

### Course description

This course provides an opportunity to learn the professional nursing role in planning care of the adult patients with common medical conditions in a variety of settings including respiratory, cardio-vascular, gastro-intestinal, urological, endocrine, neurological, skin disorders with the emphasis on promotive, preventive, curative and rehabilitative aspects of nursing care. It will also encourage them to reflect on current nursing practice, develop an analytical approach to evidence based patient care.

### Course objectives

By the end of this course, the students will be able to:

- Apply concepts and theories related to health promotion of adult patients and identify their developmental needs and tasks.
- Identify nursing interventions appropriate to manage respiratory, cardiovascular, endocrine, neurological, renal, gastro intestinal and skin problems.
- Discuss different assessment parameters appropriate for determining the status of body system problems.
- Explain the etiology, pathophysiology, clinical manifestation, diagnostic investigation, preventive measures, complications, medical and nursing management of different system problems.
- Discuss common diagnostic tests, procedure and nursing responsibilities for the patient with different system disorders.
- Develop critical thinking skills through discussion of nursing process for specific illnesses/disorders.
- Discuss nursing strategies that promote cost effective care
- Design a patient teaching guide for a specific illness/es
- Advocate for high quality and safe patient care as a member of the interprofessional team.

Gain essential knowledge in the field of trauma, emergency and critical care nursing

### Course contents

### **Unit 1: Adulthood developmental tasks and needs**

**4 hrs**

- Define the terms: Adulthood, Developmental Tasks, Young adulthood, middle adulthood, Old adulthood
- Developmental needs and tasks of young and middle adulthood
- Physiological changes of young and middle adulthoods
- Common health problems and nursing implications for health promotion and prevention of illnesses

### **Unit 2: Respiratory disorders**

**18 hrs**

- Airway disorders
  - Bronchitis
  - Bronchiectasis
  - Chronic obstructive pulmonary disease
  - Atelectasis.
  - Asthma
- Alveolar disorders
  - Pneumonia
  - Pulmonary tuberculosis
  - Emphysema
  - Pulmonary edema
  - Acute respiratory distress syndrome
- Interstitium disorder
  - Interstitial Lung Disease
- Respiratory diseases affecting blood vessels
  - Pulmonary Embolism
  - Pulmonary Hypertension
- Pleural disorders
  - Pleural Effusion
- Emerging medical problems- Swine flu. SARS, Coronavirus (COVID-19) Disease
- Special management and nurse's role: incentive spirometry, Pulmonary function test, ABG Analysis

### **Unit 3: Cardiovascular and hematological disorders**

**28 hrs**

- Review structure and function of cardiovascular and circulatory system (heart and blood vasculature, cardiac cycle, blood pressure regulation, coagulation cascade)
- Etiology, pathophysiology, clinical manifestations, diagnostic measures, prevention medical and nursing management using nursing process for the following conditions including management of complications:
- Acute coronary syndrome

- Coronary atherosclerosis
  - Angina pectoris
  - Myocardial infarction
- Inflammatory myocardial diseases:
  - Rheumatic endocarditis
  - Infective endocarditis,
  - Myocarditis
  - Pericarditis
  - Cardiomyopathy
- Complications from heart disease:
  - Acute pulmonary edema
  - Congestive heart failure
  - Pericardial effusion and cardiac tamponade
  - Myocardial rupture
  - Cardiogenic shock
  - Cardiac emergency and arrest
- Vascular disorders: Hypertension, Raynaud's disease, Raynaud's Phenomenon, aneurysm,
- Electrocardiogram
  - Cardiac dysrhythmias
  - Disorders of cardiac conduction (Heart block, bundle branch blocks)
  - Disorders due to cardiac enlargement
- Hematologic disorders:
  - Hemophilia
  - Erythrocytic Disorders: Anemia, Polycythemia, Thalassemia
  - Thrombocytic disorders: Thrombocytopenia, Idiopathic thrombocytopenic purpura, Disseminated intravascular coagulation
  - Neoplastic disorders
    - Leukemias
    - Leukopenia and neutropenia
    - Lymphoma (Hodgkin's and Non-Hodgkin's Lymphoma)
    - Myeloma
- Toxic heart disorders: Effects of alcohol, effects of smoking, vascular effects of cocaine abuse
- Special procedures that need nursing management: Therapeutic phlebotomy, stress test, ambulatory blood pressure monitoring, holter monitoring, hemodynamic monitoring, pacemaker, cardio version/ defibrillator,



#### **Unit 4: Gastrointestinal disorders**

**10 hrs**

- Review structure and function of digestive system.
- Definition, risk factors, etiology, pathophysiology, clinical manifestation, diagnostic measure, prevention, medical and nursing management using nursing process for the following condition including management of complications:
  - Gastric and duodenal disorder
    - Gastritis
    - Peptic ulcer
  - Intestinal and rectal disorder
    - Irritable bladder syndrome
    - GI bleeding
  - Hepatic disorders:
    - Hepatitis
    - Alcoholic liver disease
    - Hepatic cirrhosis
    - Hepatic encephalopathy
    - Care of patient with Ascitis

#### **Unit 5: Urological disorders**

**11 hrs**

- Review structure and function of urinary system.
- Review Fluid and electrolyte imbalance.
- Etiology, pathophysiology, clinical manifestation, diagnostic measure, prevention, medical and nursing management using nursing process for the following condition including management of complications:
  - Urinary and renal dysfunction: Urinary retention, urinary incontinence, neurogenic bladder
  - Infection of the urinary tract
    - Upper urinary tract infection: pyelonephritis, interstitial nephritis
    - Lower urinary tract infection: cystitis, prostatitis, urethritis
  - Primary glomerular disease
    - Acute glomerulonephritis
    - Chronic glomerulonephritis
    - Nephrotic syndrome
  - Renal failure
    - Acute kidney injury (acute renal failure)
    - Chronic kidney injury (chronic renal failure)
  - Nephrosclerosis
  - Hydronephrosis
  - Special procedure: Dialysis- Hemodialysis, Peritoneal dialysis

**Unit 6: Endocrine disorder****15 hrs**

- Review structure and function of endocrine system.
- Laboratory investigation and analysis: radioactive iodine metabolism, serum protein bound iodine, triiodothyroxine resin uptake, urine test, blood sugar profile, glycosylated hemoglobin test and oral glucose tolerance test, t3 t4 test, serum amylase.
- Etiology, pathophysiology, clinical manifestation, diagnostic measure, prevention, medical and nursing management using nursing process for the following condition including management of complications.
- Pituitary gland disorder:
  - Hyperpituitarism
  - Hypopituitarism
  - Diabetic insipidus
  - Syndrome of inappropriate antidiuretic hormones (SIADH)
    - Thyroid dysfunction
      - Hypothyroidism
      - Hyperthyroidism
  - Thyroiditis
    - Parathyroid dysfunction:
      - Hyperparathyroidism
      - Hypoparathyroidism
- Adrenal gland disorders:
  - Adrenocortical insufficiency (Addison's disease)
  - Cushing's syndrome
  - Hyperinsulinism
    - Diabetic mellitus
      - Prediabetes
    - Type 1 diabetes
    - Type 2 diabetes
    - Gestational diabetes
    - Others forms of diabetes
  - Pancreatitis
  - Special Nursing procedures
    - Administration of insulin
    - Administration of corticosteroid

**Unit 7: Neurological disorders****18 hrs**

- Review structure and function of neurological system.

- Etiology, pathophysiology, clinical manifestation, diagnostic measure, preventive measures, medical and nursing management using nursing process for the following condition including management of complications.
- Cerebrovascular disease
  - Stroke
    - Transient ischemic stroke
    - Ischemic stroke
    - Hemorrhagic stroke
- Intracranial infections:
  - Meningitis
  - Encephalitis
- Degenerative neurological disorders:
  - Multiple sclerosis
  - Parkinson's disease
  - Alzheimer's disease
  - Muscular dystrophies
  - Seizure disorder/Epilepsy
- Cranial nerve disorder
  - Bell's palsy
  - Trigeminal neuralgia
- Disorder of peripheral nervous system:
  - Myasthenia gravis
  - Guillain barre syndrome
  - Mononeuropathies
  - Peripheral neuropathies
- Management of unconscious patients
- Role of the nurse in communicating with patient having neurological deficit.
- Neurological assessment:
  - Glasgow coma scale- Pupils (GCS-P)
  - Cranial Nerve examination
  - Muscle power assessment
  - Examination of reflexes

## **Unit 8: Skin disorders**

**10 hrs**

- Review anatomy and physiology of skin
- Diagnostic test and investigations
- Medical, surgical and nursing management of the following condition of the skin
  - Pruritus

- Secretory disorder: Hydradenitis Suppurative, Seborrheic dermatoses, Acne Vulgaris
- Bacterial infection: Impetigo, folliculitis, Abscess, Furuncle, Carbuncle, Cellulitis, Erysipelas
- Fungal infection: Taeniasis, Candidiasis
- Parasitic skin infection: Pediculosis, Scabies
- Inflammatory skin conditions: Psoriasis, Dermatitis
- Common blistering disease
- Leprosy
- Ulcers, tumors: malignant, keloids

## **Unit 9: Acute care nursing**

**28hrs**

### **Acute nursing care**

- introduction of acute nursing care: definition, domains\type in acute care.
- trends in acute care.

### **Trauma and emergency nursing**

- Overview of emergency nursing
  - Concept, scope, and practice of emergency nursing
  - Priorities and principle of emergency care (triage)
  - Basic life support: (Omit)
  - Advanced cardiac life support
  - Pre hospital care\first aid - Dog bite, Snake bite, Insect bite, Epistaxis
  - Golden rule of emergency care
- Organization of emergency unit: physical setup, staffing, equipment, supply and protocols, Crash cast.
- Coordination and involvement of different department and facilities.
- Common emergency problem and their management
  - Respiratory emergencies: acuterespiratoryfailure, acuterespiratory distress syndrome, acute pulmonary edema, pulmonary embolism, tension pneumothorax/hemothorax, respiratory arrest.
  - Cardiac emergency: MI, Stroke, sudden cardiac death, pericardial tamponade, aortic aneurysm rupture,
  - Shock and hemorrhage
  - Poly trauma
  - Poisoning: (organophosphorous, chemical, kerosene, acid etc.)
  - Others: Common emergencies; paediatric, psychiatric obstetrics
- Nurses role in mass casualty management in emergency department (triage).

- Ethical and legal issue in emergency nursing care

### **Critical care nursing**

- Introduction
- Terminologies used in critical care nursing
- Purpose and principle of critical care nursing
- Role of critical care nurses
- Organization: physical setup, policies, staffing, protocol, equipment and supplies
- Use and care of special equipment such as ventilator and cardiac monitor, defibrillators, resuscitation equipment
- Nursing management of critically ill patient
  - nursing assessment, history and physical assessment
  - monitoring of critical ill patient
  - Treatment and procedure
  - Legal and ethical aspect
  - Communication with patient and family
  - Intensive care record and report
  - Emergency drug general guidelines about drug administration
- Non Invasive Ventillation: BiPAP, CPAP
- Mechanical ventilation
  - History of mechanical ventilation
  - Components of mechanical ventilation
  - Indications and contraindication of mechanical ventilation
  - Classification of mechanical ventilation
  - Principle of mechanical ventilation
  - Mode of ventilator and complication
  - Weaning from ventilator support
  - Nursing care of mechanically ventilated patient

### **Unit:10 Infectious and emerging diseases**

**8hrs**

- Review of infection control and Prevention practices
- Prevalence, etiology and pathophysiology, clinical manifestations and treatment, preventive measures and nursing management of following diseases:
  - Hepatitis A, Hepatitis B, Hepatitis C, Hepatitis E, Hepatitis G
  - HIV AIDS
  - Bird flu, Swine Flu, SARS, Malaria, Kala-azar, Scrub Typhus, Leptospirosis, Rabies, Zika Virus infection, Ebola Virus infection, COVID-19

### **TEACHING /LEARNING METHODS**

- Interactive lecture
- Group discussion

- Brainstorming
- Project work
- Seminars
- Simulation
- Self-directed learning
- Virtual Teaching
- Demonstration
- Case studies and presentation

#### **EVALUATION**

- Internal assessment 30%
  - Class presentation
  - Project work
  - Written examination
- Final examination 70%

## **ADULT MEDICAL NURSING (PRACTICAL)**

<b>Course No: BSN 12</b>	<b>Placement: Second Year</b>
<b>Hour: 462</b>	<b>Total mark: 100</b>

### **Clinical course description**

This course provides an opportunity to learn the professional nursing role in planning care of the adult patients with common medical conditions in a variety of settings including respiratory, cardio-vascular, gastro-intestinal, urological, endocrine, neurological, skin disorders with the emphasis on promotive, preventive, curative and rehabilitative aspects of nursing care. It will also encourage them to reflect on current nursing practice, develop an analytical approach to evidence based patient care.

### **Course objectives**

Upon completion of the course the student will be able to:

- Collect data related to the etiology/ predisposing factors causing diseases
- Identify the manifestations of medical conditions from the underlying pathophysiological changes
- Correlate the principles of physical, biological and behavioral sciences in application of nursing process in care of patients with specific conditions.
- Conduct health education for individuals and group.
- Provide comprehensive nursing care according to need of patient.
- Assist in various diagnostic, therapeutic and surgical procedures.
- Maintain logbook in intensive care unit and emergency department.

### **Clinical experience**

This clinical experience will consist of a total of 462 hours. They are posting in medical ward (5 weeks), ICU (2 weeks), emergency department (2 weeks), hemodialysis & dermatology (2 week). The students will apply knowledge, skills and attitudes and competency in the holistic care of adult client in different areas. Students will be supervised at all times during this experience.

### **Clinical activities**

- Comprehensive nursing care of selected patient using nursing process approach.
- Assist in special diagnostic procedures such as paracentesis, CVP line, ECG monitoring etc.

- Case studies & case presentation
- Health teaching
- Drug book and log book in ICU/emergency settings
- Maintain diary in ward setting
- Perform CPR in emergency department
- Provide care to ventilated patient.
- Provide patient care before, during and after doing hemodialysis.
- Write the nursing care plan in medical ward.

### **EVALUATION**

- Internal assessment 50%
  - Clinical performance in medical ward                      20 marks
  - One case study and presentation                              10 marks
  - Nursing care plan- 2 in medical ward                        5 marks
  - Formal health teaching in medical ward                      5 marks
  - Log book maintenance in each area (ICU and Emergency) 10 marks
- University examination 50%
  - Practical exam
  - Viva voce

### **TEXTBOOKS**

- Hinkle. J.L., Cheever K.H (2014). *Brunner and Suddarth's Text Book of Medical Surgical Nursing*, 13<sup>th</sup> edition, Lippincott Williams & Wilkins, Wolters Kluwer business (India).
- Jayce M. B. & Jane H. H. (2009). *Medical Surgical Nursing- Clinical Management for positive outcomes, single volume*, 8<sup>th</sup> edition, Elsevier (India).

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- Jim H. (2014). *Harrison's principle of internal medicine*, 18<sup>th</sup> edition, MC grew hill companies, United States of America.
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- Linton A. D. and Nancy K. M. (2011). *Introduction to Medical-Surgical Nursing*, 5<sup>th</sup> edition. W.B. Saunders Company.
- Lois W., Gena D. & Wendy B. (2012). *Medical Surgical Nursing: An Integrated Approach*, 3<sup>rd</sup> edition, Delmar Publishers.
- Marianne C. & Suzanne M. B. (2006). *AACN Essentials of Critical Care Nursing*.



McGraw- Hill, Medical Publishing Division.

- Maureen F. & Jennifer D. (2013). *Smeltzer & Bare's Textbook of Medical- Surgical Nursing*. 3<sup>rd</sup> edition, Lippincott Williams & Wikins, Wolters Kluwer.
- Nursing curriculum (B.Sc.), Jawaharlal institute of postgraduate medical education and research (JIPMER).008-009.
- Priscilla T Le., Karen M. B., Gerene B. & Paula G. (2014). *Medical-Surgical Nursing: Clinical Reasoning in Patient Care*, 6<sup>th</sup> edition.
- Stanley M. & Beare P.G. (2007). *Gerontological nursing: A health promotion/protection approach*. 2<sup>nd</sup> edition, Philadelphia, Fadavis Co.

## **ADULT SURGICAL NURSING (THEORY)**

<b>Course No: BSN 13</b>	<b>Placement: Second Year</b>
<b>Hour: 150</b>	<b>Total mark: 100</b>

### **Course description**

This course provides students an opportunity to apply the nursing process/ problem solving approach mainly in the care of adult patients with common surgical conditions in a variety of settings with the emphasis on promotive, preventive, curative and rehabilitative aspects of nursing care. The course also provides opportunity to the students to learn about Operation Theater nursing technique, oncology nursing and long- term care.

### **Course objectives**

At the end of the course the students will be able to:

- Understand the epidemiology, etiology, pathophysiology, clinical features, diagnostic assessment, surgical and nursing management of different disorders in respiratory, cardiovascular, gastrointestinal, urological, musculoskeletal, neurological, endocrine.
- Describe the comprehensive management of the patient with eye, ear, nose and throat disorders using nursing process.
- Synthesize evidence-based nursing care for different surgical conditions through the nursing process.
- Advocate for high quality and safe patient care as a member of interprofessional team.
- Gain essential knowledge and skills vital for safe and effective perioperative nursing management.
- Discuss the management of patient with long term illness, burn and those requiring rehabilitation.
- Describe ethical and legal principles impacting health care for patients requiring palliative care.

### **Course contents**

#### **Unit 1: Respiratory disorders**

**10hrs**

- Review structure and function of the respiratory system
- Assessment: Health history, physical examination
- Special diagnostic procedure: Laryngoscopy, bronchoscopy, thoracocentesis, pulmonary angiography, thoracoscopy
- Etiology, pathophysiology, diagnostic investigations, preventive measures, surgical and nursing management using nursing process for the following respiratory conditions

including management of complications:

- Pleural conditions: pleurisy, pneumothorax, hemothorax, hemopneumothorax, pyothorax, chylothorax, pleural effusion, empyema
  - Lower Respiratory infections: lung abscess
  - Chest tumors: lung cancer,
  - Blunt chest trauma: Rib fractures, Flail chest, Pulmonary contusion
  - Penetrating chest trauma: gunshot and stab wounds.
- Special surgical procedure and nurse's role: Chest physiotherapy, tracheostomy, chest tube/water seal drainage, postural drainage, pleural aspiration, lung resection, lung transplantation

### **Unit 2: Cardiovascular disorders**

**7 hrs**

- Review structure and function of the cardiovascular system
- Assessment: Health history, physical examination
- Special diagnostic procedure: cardiac catheterization and angiography
- Etiology, pathophysiology, diagnostic investigations, preventive measures, surgical and nursing management using nursing process for the following cardiovascular conditions including management of complications:
  - Inflammatory cardiac disease: Valvular heart disease (mitral regurgitation and stenosis, aortic regurgitation and stenosis, tricuspid stenosis and regurgitation)
  - Complications from heart disease: pericardial effusion, cardiac tamponade
  - Vascular disorders: thrombophlebitis, arterial embolism, aneurysm, peripheral venous disease (venous thromboembolism, thrombophlebitis, deep vein thrombosis, varicose vein), Buerger's disease, peripheral artery occlusive disease

### **Unit 3: gastrointestinal disorders**

**20 hrs**

- Review structure and function of the digestive system
  - Assessment: Health history, physical examination
- Special diagnostic procedures: gastric analysis, gastric acid stimulation test, duodenoscopy, gastroscopy, oesophagogastroduodenoscopy, Endoscopic Retrograde Cholangiopancreatography (ERCP), barium meal, barium enema, breath test, scintigraphy, proctoscopy, sigmoidoscopy, colonoscopy, peritoneoscopy, laparoscopy, liver biopsy etc.
- Etiology, pathophysiology, diagnostic investigations, surgical and nursing management, using nursing process for the following gastrointestinal conditions including management of complications:
    - Disorders of oral cavity: dental plaque and caries, cancer of oral cavities
    - Esophagus disorder: Hiatal hernia, foreign bodies, esophageal varices, esophageal perforation, Barrett's esophagus, cancer of esophagus
    - Gastric and duodenal disorders: gastric cancer
    - Intestinal and rectal disorders: appendicitis, diverticular disease, peritonitis, Crohn's

- disease, ulcerative colitis, hernias, intestinal obstruction, colorectal cancer, anorectal abscess, anal fistula, anal fissure, hemorrhoids, pilonidal sinus/cyst
  - Hepatic disorders: liver abscess, liver trauma, hepatocellular carcinoma
  - Biliary disorders: cholecystitis, cholelithiasis
- Special surgical management and nurses role – gastrointestinal intubation, gastrostomy, gastrostomy and jejunostomy feeding, paracentesis, endoscopic variceal ligation, surgical bypass procedures, ileal conduit, ileostomy, colostomy, liver transplantation

#### **Unit 4: Musculoskeletal disorders**

**18 hrs**

- Review the structure and function of musculoskeletal system
- Assessment: Health history, physical examination
- Special diagnostic procedures: radiographic studies, electrographic procedures, arthroscopy/arthrogram/arthrocentesis.
- Etiology, pathophysiology, treatment and nursing management, using nursing process and preventive measures for the following conditions including management of complications:
  - Musculoskeletal trauma: contusions, strains, and sprains, joint dislocation, fracture
  - Common musculoskeletal problems: prolapsed intervertebral disc
  - Common problems of the upper extremity: bursitis and tendonitis, carpal tunnel syndrome, ganglion
  - Common foot problems: Hammertoes, blisters, bunions, corns, calluses
  - Metabolic bone disorders: osteoporosis, osteomalacia, gout
  - Musculoskeletal infections: osteomyelitis, septic arthritis
  - Osteoarthritis
  - Rheumatic disorders: rheumatoid arthritis, spondyloarthropathies
  - Neoplasm of bone
- Special surgical management and nurses role- Amputation, open and close reduction, endoprosthetic replacement, bone grafting, total knee replacement, total hip replacement
- Musculoskeletal care modalities: care of the patient in a cast, splints and braces, skin and skeletal traction, crutches, cane, walker
- Rehabilitation of patient with musculoskeletal disorders

#### **Unit 5: Urological disorders**

**5 hrs**

- Review structure and function of urinary system
- Assessment: Health history, physical examination
- Special diagnostic procedures: Nuclear scans, Intravenous urography, cystoscopy, Retrograde pyelography, biopsy, renal angiography, urodynamic studies
- Etiology, pathophysiology, diagnostic investigations, surgical and nursing management, using nursing process for the following urological conditions including management of complications:
  - Urinary and renal disorders:

- Urolithiasis
- Renal abscess
- Prostate cancer, bladder cancer, renal cell carcinoma
- Genitourinary trauma
- Hydrocele
- Benign prostrate hyperplasia (BPH)
- Special surgical management and nurse's role: Cystectomy, Transurethral Resection of Bladder Tumor (TURBT), Transurethral Resection of Prostate (TURP), bladder irrigation, renal transplantation

**Unit 6: Endocrine disorders**

**3 hrs**

- Review the structure and function of endocrine system
- Assessment: Health history, physical examination
- Etiology, pathophysiology, diagnostic investigations, treatment and nursing management, using nursing process for the following endocrine conditions including management of complications:
  - Pituitary gland disorders: pituitary adenoma
  - Thyroid dysfunction: Thyroid cancer
  - Adrenal glands disorders: pheochromocytoma
  - Pancreatic disorders: Cancer of pancreas
- Special surgical management and nurse's role: Transsphenoidal hypophysectomy, thyroidectomy, pancreatectomy, Whipple's operation

**Unit 7: Neurological disorders**

**5 hrs**

- Review the structure and function of nervous system
- Assessment: Health history, physical examination
- Special diagnostic procedures: myelography, electroencephalography, electromyography, lumbar puncture etc.
- Etiology, pathophysiology, diagnostic investigations, surgical and nursing management, using nursing process for the following neurological conditions including management of complications:
  - Neurological trauma: head injury, spinal cord injury
  - Intracranial tumors: meningiomas, gliomas
  - Intracranial infections: brain abscess
  - Intracranial aneurysm
- Special surgical management and nurse's role- external ventricular drains, ventriculoperitoneal shunt, craniotomy and cranioplasty

## **Unit 8: Eye disorders**

**10 hrs**

- Review structure and function of eye
- Examination of eye and assessment of vision
- Diagnostic tests done in different ocular disorders and related nursing consideration: direct and indirect ophthalmoscopy, slit lamp examination, color vision testing, applanation and non- contact tonometry, gonioscopy, perimetry, fluorescein angiogram, ultrasonography
- Etiology, pathophysiology, diagnostic investigations, surgical and nursing management, using nursing process for the following ocular conditions including management of complications:
  - Errors of refraction: Emmetropia, Ametropia, Anisometropia, Antimetropia
  - Disease of conjunctiva: conjunctivitis, trachoma
  - Disease of cornea: keratitis, corneal ulcer,
  - Disease of sclera: episcleritis,
  - Disease of uveal tract: anterior and posterior uveitis
  - Disease of lens: cataract
  - Glaucoma
  - Disease of retina: retinitis, retinal artery occlusion, retinal detachment,
  - Disease of eye lids: inflammatory disorders (blepharitis, chalazion, sty), anomalies in position of lashes and lid margin (trichiasis, entropion, ectropion, ptosis)
  - Disease of Lacrimal apparatus: dry eye, watering eye, dacryocystitis
  - Disease of orbit: inflammation, proptosis
  - Injuries to eye, Vitamin A deficiency, Blindness, Eye donation
    - Special surgical management and nurse's role: syringing of eye, Dacryocystectomy, Dacryocystorhinostomy, Iridectomy, cataract surgery, trabeculectomy and trabeculoplasty,

## **Unit 9: Ear disorders**

**10 hrs**

- Review anatomy of ear and physiology of hearing and equilibrium
- Assessment of the client with ear disorders
- Diagnostic procedures for ear disorders (otoscopic examination, whisper test, weber test, rinne test, audiometry, tympanogram, auditory brain stem response, electronystagmography, middle ear endoscopy)
- Etiology, pathophysiology, diagnostic investigations, surgical and nursing management, using nursing process for the following ocular conditions including management of complications:
  - Problems of external ear: congenital conditions, inflammatory condition of pinna, infective condition of external auditory meatus, tumors, foreign body in ear
  - Problems of middle ear: acute otitis media, chronic otitis media, otitis media with

effusion

- Problems of internal ear: labyrinthitis, vertigo and meniere's disease, acoustic neuroma
- Hearing impairment
- Aural rehabilitation
- Special surgical management and nurse's role: syringing of ear, tympanotomy, tympanoplasty, myringotomy, myringoplasty, modified mastoidectomy

### **Unit 10: Nose and throat disorders**

**18 hrs**

- Review anatomy and physiology of the nose and throat
- Assessment of the client with nose and throat disorders
- Diagnostic tests and investigations: nasal endoscopy, direct and indirect laryngoscopy
- Nursing management of the following conditions of the nose and throat:
- Disease of external nose and nasal cavity: infective condition, foreign body in nose
  - Disease of nasal septum: deviated nasal septum, septal perforation, septal abscess
  - Inflammatory disorders of nasal cavity: acute and chronic rhinitis, allergic rhinitis
  - Nasal polyps
  - Epistaxis
  - Trauma to the face
  - Obstructive sleep apnoea
  - Acute and chronic sinusitis
  - Disease of oral cavity and salivary glands: stomatitis, sialadenitis
  - Disease of pharynx: , acute and chronic pharyngitis, acute and chronic tonsillitis, peritonsillar abscess, Ludwig's angina
  - Disease of larynx and trachea: acute and chronic laryngitis, laryngotracheal trauma, foreign body, tumors of larynx
- Special surgical management and nurse's role: septoplasty, functional endoscopic sinus surgery, tonsillectomy, laryngectomy, laryngoplasty

### **Unit 11: Burn injury**

**4 hrs**

- Definition
- Types of burn injury
- Classification of burn injuries according to the depth of the injury and the extent of body surface area injured.
- Pathophysiology of burns
- Local and systemic effects of a major burn injury
- Complications of burn
- Medical, surgical and nursing management

- Skin grafting and care of patient having graft
- Rehabilitation of patient with burn

### **Unit 12: Perioperative nursing management**

**20 hrs**

- Terminologies related to perioperative nursing
- History of surgery
- OT design/ physical set up
- Phases of the perioperative period: preoperative, intraoperative, postoperative
- Preoperative nursing management (review from fundamental of nursing)
- The surgical team and their functions
- Operation theatre technique
  - Techniques of scrubbing, gowning and gloving
  - Surgical skin preparation
  - Patient position and draping on the operating table
  - Perioperative asepsis
  - Environmental sanitation of OT
- Machine and equipment's for the operation; care and handling
- Surgical Instruments; care and handling
- Surgical supplies for operation (suture material, drains and catheters); care and handling
- Surgical site infection prevention
- Potential hazards in OT and nursing responsibilities
- Anesthesia: definition, types, advantages, disadvantages, complication and nursing responsibilities
- Post-operative nursing management in immediate and delayed postoperative period
- Postoperative complications: assessment and management

### **Unit 13: Oncology**

**5 hrs**

- Definition
- Epidemiology
- Pathophysiology of the malignant process
- Detection and prevention of cancer:
  - Warning signs of cancer
  - Primary prevention
  - Secondary prevention
- Diagnosis of cancer and related nursing consideration
- Modalities of cancer management:
  - Surgery
  - Radiation therapy



- Chemotherapy
- Bone marrow transplantation
- Biologic response modifiers
- Monoclonal antibodies
- Gene therapy
- Oncological emergencies: Structural (spinal cord compression, cardiac tamponade, superior vena cava syndrome), mechanical (tumor lysis syndrome, hypercalcemia, disseminated intravascular coagulation)
- Nursing care of patient with cancer

#### **Unit 14: Long term care**

**15 hrs**

- Chronic illness:
  - The phenomenon of chronicity
  - The characteristics of chronic conditions
  - Nursing care for patients with chronic illness
- Disability:
  - Definition
  - Types of disability
  - Nursing considerations while caring for clients with disability
- Rehabilitation:
  - Definition of rehabilitation
  - Need of rehabilitation
  - Physiological and psychological benefits of rehabilitation
    - Goals of rehabilitation
    - Steps in rehabilitation
    - Discharge teaching and referrals
  - Health care of older adults (Review from geriatric nursing)
  - Hospice and Palliative care:
    - Definition
    - History of hospice and palliative care
    - Philosophy of hospice and palliative care
    - Trajectory of death
    - Good death
    - Communication: breaking bad news
    - Oncology and palliative care
    - Palliative care in non-malignant disease (Diabetes, Renal Failure, Respiratory Problems, Cardiac Problems, HIV/ AIDS)
    - Management of common Symptoms in Palliative Care Setting (Nausea and Vomiting, Oral Problems, Diarrhea/ Constipation, Anorexia/ Cachexia, Pressure

Sore/ Wound, Pain, Lymphoedema, Nutritional problems)

- Palliative care in home
- Emergencies in palliative care (Spinal Cord Compression, Hemorrhage, Superior Vena Cava Obstruction, Hypercalcemia, Airway obstruction, Pain crisis or other unrelieved symptoms, Seizures)
- Ethical issues in hospice and palliative care

### **Teaching/learning methods**

- Structured interactive session Seminars
- Project work
- Observation of patients in real situations
- Case studies/presentations
- Virtual teaching

### **Evaluation**

- Internal assessment 30%
  - Project work/presentation
  - Written tes
- Final examination 70%  
Written test

## **ADULT SURGICAL NURSING (PRACTICAL)**

<b>Course no: BSN 14</b>	<b>Placement: Second year</b>
<b>Hours: 294</b>	<b>Marks: 100 hours</b>

### **CLINICAL OBJECTIVES**

Upon completion of required practicum hours' students will be able to:

- Perform history taking and physical examination of surgical clients.
- Assist in various diagnostic, therapeutic and surgical procedures.
- Provide comprehensive nursing care according to need of patient.
- Develop competency in caring for a burn patient by paying special emphasis on prevention of infection, contracture and disfiguration.
- Apply the knowledge of infection prevention and takes precaution in preparation of the operation theatre/room for surgery.
- Prepare patient for anesthesia, administer premedication before surgery, and does final preparation of patient undergoing surgical procedure.
- Demonstrate skill in assisting the surgeon or performing the role of a circulatory nurse in the operating theatre.
- Provide immediate postoperative nursing care in the recovery room and takes responsibility of transferring of patient.
- Take responsibility in after care of the surgical instrument and ensures the readiness of such instrument and other equipment's for future use.
- Demonstrate the understanding of possible health hazards in operating room, and takes all the necessary precautions for the safety of o.t. staff and patient/s.
- Provide comprehensive nursing care to cancer patients.
- Provide comprehensive nursing care to the patients requiring long- term care.

### **CLINICAL EXPERIENCE**

The clinical experience in this course will be of total of 294 hours (7 weeks). Students will have experiences in various areas such as Surgical ward (4 weeks), Orthopedic ward (1 week), EENT (1 weeks), and Operation Theatre (1 weeks). There will be a clinical evaluation at the end of this experience.

### **CLINICAL ACTIVITIES**

- Comprehensive care of selected patients in each area
- One case study and presentation

- Practice as a scrub nurse and circulating nurse for at least 2 major and 2 minor cases.
- Work in a recovery room.
- Assist in anesthesia
- Health teaching in different areas
- Nursing care plan
- Log book maintenance

#### **EVALUATION**

- Internal Assessment 50%
  - Clinical performance in surgical ward 15 marks
  - One case study and presentation in surgical or orthopedic Ward 10 marks
  - Nursing care plan- one in each area (surgical and orthopedic ward) (5+5) =10 marks
  - Health teaching in surgical or orthopedic ward 5marks
  - Logbook maintenance in each area (Eye/ENT, OT log & performance checklist)2.5+2.5+5=10 marks
- University examination 50%
  - Practical Examination
  - Viva Voce

#### **TEXTBOOKS:**

- Black, J.M., & Hawks, J.H. (2009). *Medical Surgical Nursing- Clinical Management for positive outcomes* (8<sup>th</sup> ed.). India: Elsevier.
- Dhingra, P. L. (2017). *Diseases of Ear, Nose and Throat* (7<sup>th</sup> ed.). India: Elsevier
- Hinkle, J.L., & Cheever, K.H. (2017). *Brunner and Suddarth's Text Book of Medical Surgical Nursing* (14<sup>th</sup> ed.). India: Lippincott Williams & Wilkins.
- Ignatavicius, D.D., Workman, L.M. (2016). *Medical Surgical Nursing Patient Centered Collaborative Care* (8<sup>th</sup> ed.). USA: Elsevier.
- Khurana, A.K. (2019). *Comprehensive Ophthalmology* (7<sup>th</sup> ed.). New Delhi: New Age International Limited Publisher.
- Maheshwori, J., Mhaskar, V.A. (2019). *Essential of orthopedics* (6<sup>th</sup> ed.). New Delhi: Jaypee Health Sciences Publisher.
- Philips, N. (2016). *Berry and Kohn's Operating Room Technique* (13<sup>th</sup> ed.). India: Elsevier.

#### **Reference**

- LeMone, P., Burke, K.M. & Bauldoff, G. (2010). *Medical-Surgical Nursing: Critical Thinking in Patient Care* (5<sup>th</sup> ed.). United States: Pearson
- Linton, A.D. (2015). *Introduction to Medical-Surgical Nursing* (6<sup>th</sup> ed.). India: Elsevier.
- Lewis, S.L., & Dirksen, S.R. (2016). *Medical-Surgical Nursing, Assessment and Management of Clinical Problems* (10<sup>th</sup> ed.). Mosby Company.

- Morton, P. G. (2014). *Essentials of critical care nursing-A holistic approach*. Philadelphia: Lippincott Williams & Wilkins.
- Nettina, S. M., (2019). *Lippincott Manual of Nursing Practice* (11<sup>th</sup> edition). Philadelphia: Lippincott Williams & Wilkins.
- Russel, R.C.G., Williams, N.S., & Bulstrode, C.J.K., (2018). *Bailey & Love's Short Practice of Surgery* (27<sup>th</sup> ed.). Great Britain: Arnold.
- Shenoy, K.R., & Shenoy, A., (2020). *Manipal manual of surgery* (5<sup>th</sup> ed.). CBS publishers and distributors.
- Smeltzer, S. C., & Bare, B.G., (2016). *Textbook of Medical-Surgical Nursing* (4<sup>th</sup> ed.). Australia: Wolters Kluwer.
- Thresyamma, C. P., (2010). *Operating Room Technique and Anesthesia for General Nursing Course* (3<sup>rd</sup> ed.). New Delhi: Jaypee Brothers Medical Publishers.
- Tuli, B.S., (2013). *Textbook of ear, nose and throat* (2<sup>nd</sup> ed.). New Delhi: Jaypee brothers.

## GERIATRIC NURSING (THEORY)

<b>Course no: BSN 15</b>	<b>Placement: Second year</b>
<b>Hours: 50</b>	<b>Marks: 50</b>

### Course description

The course provides an overview of physical, psychosocial and cultural aspects of the aging process and the concept of healthy ageing. It addresses comprehensive geriatric assessment, health promotion and disease prevention of older adults. It reviews common health problems of aging, nursing implications. It also includes/addresses ethical and legal aspects, national plans and policies regarding the older adults.

### Course objectives

- Describe the concepts, history and terminologies of geriatric nursing
- Discuss the theories of aging, developmental needs and tasks
- Describe the physiological and psychosocial changes, health promotion and end of life care
- Explain the comprehensive geriatric assessment and integrated care of older adults (ICOPE)
- Discuss the common disorders, geriatric emergencies and geriatric syndromes
- Explain the National plan and policies, social security and institutionalization of older adults

### Course contents

#### Unit 1: Introduction to geriatric nursing

**8 hrs**

- Overview of Geriatric Nursing
- History of geriatric nursing
- Terminologies: older adult, aging, gerontology, geriatrics, geriatric nursing, life expectancy, healthy aging, respite care, activities of daily living, instrumental activities of daily living, ageism, intrinsic capacity and functional ability
- Characteristics of healthy aging
- Changing demographics of elderly people and its effect on health care system
  - Developmental tasks of elderly
  - Moral and spiritual development in older people
  - Concepts of healthy / successful aging

- Legal aspects that affects older adults
- Ethical aspect that affect older adults
- Misconceptions about the older adults
- Role of nurses in geriatric care

**Unit 2: Theories of aging**

**4 hrs**

- Physiological theory
  - Immunological
  - Neuro endocrine
  - Cross- linkage theory
- Biological theories of aging
  - Cellular theory
  - Wear and tear theory
- Social theories of aging
  - Disengagement theory
  - Activities theory
  - Continuity theory
- Psychological theories of aging
  - Personality theory
  - Maslow's Human Need Theory
- Developmental Theory of elders
  - Erikson's developmental theory in older people

**Unit 3: Physiological and psychosocial changes in older adults**

**4 hrs**

- Physiological changes in different systems during ageing process and their clinical implications
- Cognitive aspects of aging
- Psychosocial changes
  - Retirement
  - Social relationship
  - Living environment
  - Ageism
  - Loss of independence

**Unit 4: Assessment and integrated care for older people (icope)**

**4 hrs**

- Introduction to Integrated Care for Older People (ICOPE)
- Comprehensive geriatric assessment
- Geriatric assessment tools from ICOPE
  - Cognitive assessment

- Locomotor/functional assessment
- Nutritional assessment
- Sensory assessment
- Psychological assessment

**Unit 5: Health promotion and health care needs**

**6 hrs**

- Health promotion and health care needs of the older adults
  - Regular health checkup and screening
  - Nutritional needs
  - Physical activities and safety needs
  - Rest and sleep
  - Stress management
  - Spirituality
  - Sexuality
- Rehabilitation of elderly
  - Disability in elderly people
  - Sensory (Touch, visual, hearing, smell, taste) deficit and communication problems in elderly people including their management
  - Home care for frail older adults
  - Institutionalization for elderly people:
- Preparing for death and dying
  - Care of the terminally ill elderly at hospital and home
  - Palliative care
  - Hospice
  - Preparation for death and dying (individual and family)

**Unit 6: Common health problems and geriatric emergencies**

**6 hrs**

- Common disorders in different systems
- Sensory disorders: Senile cataract, Glaucoma, Presbyopia, Hearing deficit Presbycusis
  - Integument disorders: Dermatitis, Pruritus
  - Musculoskeletal disorders: Osteoporosis, Osteoarthritis, Pathological fracture
  - Neurological disorders: Multiple sclerosis, Parkinson's disease
- Cardiovascular disorders: Hypertension, Atherosclerosis, Congestive cardiac failure (CCF), Corpulmonale
- Pulmonary disorders: Chronic obstructive pulmonary disease (COPD), Pneumonia, atelectasis
- Endocrine disorders: Diabetes mellitus, hypothyroidism



- Genitourinary disorders: Benign prostatic hyperplasia (BPH), urinary incontinence, senile vaginitis
- Gastrointestinal disorders: Constipation, Diarrhea, , indigestion
- Geriatric emergencies: Syncope, chest pain and atrial fibrillation, sepsis

### **Unit 7: Geriatric syndromes**

**8 hrs**

- Geriatric syndromes: multiple problems with multiple etiologic factors in older adults
  - Delirium
  - Immobility
  - Incontinence
  - Falls
  - Pain and pain management
  - Polypharmacy
  - Friality
  - Pressure ulcer
  - Sleep disorders
  - Malnutrition

### **Unit 8: Common psychosocial and behavioral problems**

**4 hrs**

- Psychosocial problems in the elderly and its management
  - Sleep disturbances
  - Loneliness
  - Empty nest syndrome
  - Loss and grief
  - Alzheimer's, Dementia,
  - Abuse and negligence in older adults
- Special behavioral problems: demanding, repetitious, annoying, persistent behavior, paranoid and suspicious behavior, assault, inappropriate sexual behavior

### **Unit 9: Cultural and caregiver concerns**

**2hrs**

- Cultural competency among nurses in geriatric care
- Role of family, community, and social support systems for older people.
- Caregiver burden among caregivers of elderly and it's management

### **Unit 10: National policy and programs**      **4 hrs**

- Health care policy of Nepal (From constitution)

- National and social support to older adults
  - Pension/retirement fund,
  - elderly allowances,
  - transportation concession
  - Health care Support
- Institutionalization of older adults: Geriatric home, Home care of elderly people, geriatric rehabilitation center

### **TEACHING LEARNING METHOD**

- Structure Interactive Lecture and Discussion
- Virtual learning
- Group presentation
- Project work
- Self-directed learning
- Role play

#### Evaluation

- Internal assessment 30%
  - Written exam
  - Project work
  - Report writing and presentation
- Final examination
  - Written exam

## GERIATRIC NURSING (PRACTICAL)

<b>Course no: BSN 16</b>	<b>Placement: Second year</b>
<b>Hours: 126</b>	<b>Marks: 50</b>

### **Clinical objectives**

On completion of this course, the student will be able to:

- Provide care to elderly clients according to their need using nursing process.
- Identify problems and need and try to solve it.
- Plan & give health teaching according to need in groups and individual.
- Maintain safety devices to elderly clients.
- Communicates effectively to teach/counsel client/family with focusing on their special need/s.
- Incorporate the nursing process in the care of elder patients.

### **Clinical experience**

Clinical experience will include a total of 126 hours (3weeks) in geriatric nursing. The student will practice in geriatric institution or caring centre and apply knowledge, skills, attitudes and competency in the holistic care of elderly people using nursing process.

### **Clinical activities:**

- Case study presentation
- Nursing care plan
- Maintain log book on assessment of patient
- Health teaching/ Role play

### **EVALUATION**

- Internal assessment      50%      (25Marks)
  - Case study and presentation      5
  - Health Assessment      5
  - Health teaching/ role play      5
  - Performance evaluation      10
- University examination - 50%      25Marks
  - Viva Voce

### **TEXT BOOK**

- Burke, M. M., & Laramie, J. A. (2000). *Primary care of the older adult: A multidisciplinary approach*. St. Louis, MO: Mosby.
- Cotter, V.T., & Strumpf, N.E.
- Gelder, M., Mayau Rand Geddes J. (2000). *Psychiatry*. (2<sup>nd</sup> Ed.). Great Britain: Oxford

University Press.

- Hinkle. J.L., Cheever K.H (2014). *Brunner and Suddarth's Text Book of Medical Surgical Nursing*, (13<sup>th</sup> ed.), Lippincott Williams &Wilkins, Wolters Kluwer business (India).
- K.C.,T, and Rai, B. (2015). *Text book of Geriatric Nursing*. Kathmandu: Nepal Heritage Publications

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- Allender, J.D., and Spradley, W.S., *Community Health Nursing: prompting and protecting the Public's Health*. (2005). Lipincott Williams Wilkins.
- Meiner, S.E., (2015) *Geriatric Nursing*. (5<sup>th</sup> ed.). Elsevier Mosby.
- Mandal, G.N.(2015). *A text Book Geriatric Nursing*. Kathmandu: Makalu Publication House.
- Ruth Murray, R.B. , Judith Zentner, J., Richard Yakimo, R. (2009). *Health Promotion Strategies through the life span*. (8<sup>th</sup> ed.) New Jersey: Pearson Education, Company
- Wister, A.V. & McPherson, B. (2014). *Aging as a Social Process: Canadian Perspectives* (6<sup>th</sup> Edition). Don Mills ON: Oxford University Press.
- Stanley, m. & beare, p.g. *Gerontological Nursing: a health promotion/ protection approach*. 2<sup>nd</sup> edition. Philadelphia: f.a. Davis co. 1999.

## NURSING CONCEPTS (THEORY)

<b>Course no: BSN 17</b>	<b>Placement: Second year</b>
<b>Hours: 75</b>	<b>Marks: 50</b>

### **Course description**

This course is designed to facilitate students providing in depth knowledge regarding nursing profession, concept, and principles, different, legal aspects of nursing as well as ethics and values relating to the health care system. This course also focuses on pain, crisis and stress management, providing holistic health care to the client and the families in the hospital and community situation.

### **Course objectives**

On completion of the course, the student will be able to:

- Explain the concept of profession, philosophy of nursing and different regulating organizations for nursing profession in Nepal.
- Describe holistic health and different methods of alternative medicines
- Describe physiology of pain and its management
- Describe about stress and crisis management.
- Describe concept of nursing theory, and the use of theory in nursing practice
- Acquire knowledge on the legal/ ethical aspects of nursing and the role of professional growth and advocacy in nursing
- Explain creativity and its implication in nursing
- State the rehabilitation process and nursing management of patient having different problems.
- Illustrate the therapeutic relationship and its importance in nursing.

### **Course contents**

#### **Unit 1: Introduction to the nursing and profession**

**4 hrs**

- Profession: Concept, criteria and characteristics of a profession, difference between occupation and profession, nursing as a profession
- Nursing and Philosophy:
  - Concept of nursing and philosophy
  - Basic philosophies influencing nursing profession
  - Criteria for formulation of a philosophy of nursing

## **Unit 2: Review health and illness**

**4 hrs**

- Concepts of health, wellness, illness and self help
- Factors affecting health
- Dimensions of health
- Models of health and illness:
  - Health and illness continuum model
  - Health belief model
  - Health promotion model
  - Basic Human needs model
  - Holistic health models
- Stages of illness: transition from health to illness, acceptance to illness, convalescence

## **UNIT 3: HOLISTIC HEALTH CARE APPROACH 9 HRS**

- Concept of Holistic Health
- Principles of holistic health care
- Impact of holistic health in nursing
- Components and approach of holistic health
- Complementary and Alternative medicines (CAM)
- Therapeutic touch: Foot Reflexology, Reiki, Acupuncture, Accupressure
- Mind-body therapies: Progressive relaxation, Bio feedback, Guided imagery, meditation, prayer, humour and laughter, Hypnosis
- Alternative medical therapies: Ayurved, Herbal medicines, Naturopathy, Homeopathy

## **UNIT 4: PAIN AND ITS MANAGEMENT 5 HRS**

- Pain: Introduction, physiological process, types
- Factor affecting pain perception
  - Physiological factors
  - Psychological factor
  - Socio-cultural factors
- Theory of pain: (Gate control theory)
- Assessment of pain: Objective and subjective assessment
- Management of pain: Pharmacological and Non-pharmacologic pain management (Review)
  - Cutaneous stimulation (massage, heat and cold application, accupressure and TENS)
  - Diversion therapy (Visual, auditory, tactile and intellectual, Imagery)
  - Relaxation techniques (Slow rhythmic breathing, progressive muscle relaxation and meditation)

- Hypnosis
- WHO's pain relief ladder
- Role and responsibility of nurses in pain management

### **Unit 5: stress and crisis**

**8 hrs**

#### ***Stress***

- Definition, types, factors influencing outcome of stress
- Physiological process of stress(LAS and GAS)
- Models of stress: Stimulus based model, response based model, transaction based model
- Effects of stress response
- Measures for relieving stress
- Negative effects of the stress response in human
- Stress in nursing profession
- Nurses role in stress management

#### **Crisis**

- Definition, types, factors influencing outcome of crisis
- Phases of crisis
- Factors affecting the outcome of crisis: The individual's perception of the problem or event, available situational support and coping mechanism/strategy
- Nurses role in crisis resolution

### **UNIT 6: NURSING THEORIES**

**10 HRS**

- Definition and purposes of nursing theories
- Selected nursing theories: Theoretical concept and practical application of:
  - Nightingale's environmental theory
  - Henderson's theory of nursing
  - Orem's self care theory of nursing
  - Abdellah's problem solving theory
  - Roy's theory
  - Leininger's theory

### **UNIT 7: CRITICAL THINKING IN NURSING 5HRS**

- Critical thinking and Aspect of critical thinking ( reflection, language and intuition)
- Types of critical thinking
- Levels of critical thinking in nursing: Basic, complex and commitment
- Component of Critical thinking in Nursing

- Specific knowledge base in nursing
- Experience
- Critical thinking competencies
- Attitudes for critical thinking
- Standards for critical thinking
  - Intellectual standards
  - Professional standards
- Implementation of critical thinking in nursing

## **UNIT 8: PROFESSIONAL GROWTH AND DEVELOPMENT**

### **4 HRS**

- Professional growth and development in nursing
- Benner's Stages of Clinical Competence in nurses
- Regulating organization for nursing profession in Nepal
  - Professional organization-Nursing Association of Nepal (NAN), Midwifery Society of Nepal (MIDSON) etc.
  - Nepal Nursing Council (NNC)
- Trends influencing nursing education and practice

### **Unit 9: Legal aspects of nursing**

**10 hrs**

- General legal concepts and terms – Law, source of law kinds of legal actions, the civil code regarding practice and judicial process, nurses as witness, Regulation of nursing practice
- Legal roles of nurses and nursing students.
- Selected legal aspects of nursing practice:
  - Informed consent
  - Delegation
  - Bargaining
  - Violence, abuse and neglect (child, women and older adult)
  - Sexual harassment in working environment
  - Medical legal aspect of death and related issues
- Legal responsibilities of nurses and nursing students
- Areas of potential liabilities in nursing
  - Crimes and Torts
  - Loss of client property
  - Malpractice
- Legal protection in Nursing practice



- Good Samaritan acts
- Professional liability insurance
- Carrying out a physician's order
- Providing competent nursing care
- Record keeping
- Incident report
- Contract
- Client education
- Adequate staffing
- Reporting crimes, torts and unsafe practice
- Standard Order
- Legal Issues nursing practices in Nepal

### **Unit 10: Ethics and values**

**7 hrs**

- Terms and concepts of values, moral and ethics
- Nursing values
- Values transformation
- Values clarification
- Ethical aspects of nursing
- Ethical conduct
- Ethical Principles
- Code of ethics: ICN code of ethics
- Conducts of Nepal nursing council
- Common Ethical problems in nursing
- Making ethical decisions
- Rights and advocacy:
  - Introduction of the rights, patient's rights and responsibilities
  - Advocacy
    - Definition, purposes, elements of advocacy
    - Nursing role as an advocator, barriers of patient advocacy for nurses

### **Unit 11: Creativity**

**2hrs**

- Definition
- Types of creative thinking: vertical, lateral, creative, fourth dimension
- Stages of creative problem solving: preparation, incubation, illumination, verification

### **Unit 12: Rehabilitation**

**3hrs**

- Meaning, concepts and goals of rehabilitation
- Rehabilitation process

- Nursing approaches to clients with:
  - Mobility problems
  - Communication problems
  - Elimination problems
  - Threats to self-concept and body image
- Different rehabilitation centers available in Nepal

### **Unit 13: Communication and therapeutic relationship**

**4hrs**

- Technique of effective communication
- Nurse patient relationship
- Therapeutic relationship: terminologies
- Phases of therapeutic relationship
- Social relationship
- Difference between therapeutic and social relationship

#### **Teaching/learning methods**

- Classroom teaching (Lecture method)
- Reading/Discussion (Group discussion method)
- Self-directed learning
- Presentation (group/individual)
- E or virtual learning

#### **EVALUATION**

- Internal Examination 30%
  - Written assessment
- Final Examination 70%
  - Written assessment

#### **Text Book**

- Blais, K.K., Hayes, S.J. Kozier, B and Erb, G.(2015). *Professional Nursing Practice concepts and perspectives* (7<sup>th</sup> ed). Prentice Hall:Dorling Kindersley.
- Kozier, B., Erb, G. Berman, A. and Burke, K. (2012). *Fundamentals of Nursing Concepts process and practice*. (latest ed.).Singapore: Pearson Education.
  - Sharma, M. (2013).Nursing concepts and principles.(1<sup>st</sup> ed.) New Baneshwor, Kathmandu: Medhavi Publication.

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- Berman, T.A., Synder, S. & Frandsen, G. (2015). *Fundamentals of Nursing*. (10<sup>th</sup> ed.). Prentice Hall.
- Black, P. B. (2014). *Professional Nursing: Concepts and Challenges*. (7<sup>th</sup> ed.). Elsevier Saunders.

- D Elakkvana, R. B. (2011). *Nursing Theories; A practical view*. (1<sup>st</sup> ed.). Jaypee Brothers Medical Publishers (Pvt.) Ltd.
- Dossey, M.B. & Keegan, L. (2008). *Holistic Nursing: A handbook for practice*. (5<sup>th</sup> ed.). Jones & Barlett Learning.
- Henderson, V. (2004). *ICN Basic Principles' of Nursing Care*.
- Hood, J. L., Leddy, S. & Pepper, M. J. (2006). *Leddy and Pepper's Conceptual Bases of Professional Nursing*. (6<sup>th</sup> ed.). Lippincott Williams and Wilkins
- Leininger, M & Mcfarland, M. (2002). *Transcultural Nursing: Concepts, Theories, Research and Practice*. (3<sup>rd</sup> ed.). McGraw Hill Education.
- Park, K.(2016). *Preventive and Social Medicine* (23<sup>rd</sup> ed.).Nagpur Road Jabalpur, India: Banarsidas Bhanot
- Perry, G.A., Potter, A.P. and Ostendorf, R. W. (2014). *Clinical Nursing Skills and Techniques*. (8<sup>th</sup> ed.).Canada: Elsevier Mosby
- Potter, A.P, and Perry, G.A. (2013). *Fundamental of commitment: Issues and Ethics in Nursing*. Philadelphia: Saunders company
- Quinn, C. A. Smith, M.D. (1987). *The professional commitment: Issues and Ethics in Nursing*. Philadelphia: Saunders company
- Rai, L. (2011). *Nursing Concepts theories and principles*. (2<sup>nd</sup> ed.). Kathmandu, Nepal: Publisher: Nabin Kumar Rai.
- Rosdahi, B.C. and Kowalski, T.M. (2012). *Textbook of Basic Nursing*.(10<sup>th</sup> ed.).China: Lippincott Williams and Wilkins.
- Taylor, C., Lillis, L. and Leomone, O. (2011). *Fundamentals of Nursing The art and science of Nursing care*. (7<sup>th</sup> ed.). Philadelphia: Lippincott Williams and Wilkin.

## SOCIAL AND BEHAVIORAL SCIENCE (THEORY)

<b>Course no: BSN 18</b>	<b>Placement: Second year</b>
<b>Hours: 50</b>	<b>Marks: 50</b>

### Course description

This course is designed to introduce students to concepts of psychology, sociology and anthropology, which they can apply in providing health care to the clients. This course also imparts knowledge on different patterns of human behavior, cultural beliefs and practices which affects the patient's perception and response to health and illness.

### Course objectives

At the end of the course students will be able to:

- Explain the concept of sociology, anthropology and psychology.
- State the relationship between individual & society.
- Relate how socio-cultural practices influence health and health behaviour.
- Demonstrate understand of the meaning and significance of socialization including the agencies of socialization in health.
- Explain the meaning and significance of interpersonal relationship and the barriers to nurse client relationships.
- Describe the prevailing health care practices in Nepal and the factors affecting the client's selection of a particular health care provider.
- Explain the client's health behaviour from different perspectives.
- Identify the factors affecting sensation, attention and perception.
- Explain the meaning, nature and theories of emotions and the relation of emotion with health.
- Explain the theories of motivation and its application in motivating clients for healthy lifestyle practices.
- List the factors affecting learning, intelligence and memory.
- State the use of intelligence test and personality test.
- State the sources of frustration and stress and the measures for managing conflict.
- Describe the application of behavioural concepts and principle of holistic care in providing health care.

### Course content

#### Unit 1: Sociology and anthropology

**6 hrs**

- Concept, scope and branches of sociology
- Meaning and concept of medical sociology
- History, emergence, present status, of medical sociology
- Importance of sociology in nursing profession

- Historical development of society
- Asiatic society, slavery, feudal, semi feudal, capitalistic, socialistic
- Concept, scope of anthropology •
- Branches of anthropology
  - Physical and biological
  - Sociocultural
  - Applied
  - Medical anthropology
- History, emergence, present status, of medical anthropology
- Importance of anthropology in nursing profession

**Unit 2: Socialization and social learning**

**3 hrs**

- Definition, meaning and significance of socialization
- Agencies, characteristics and stage of socialization
- Theories of socialization (Sigmund Freud, Cooley, G.S mead)
- Social learning and its importance in health

**Unit 3: Culture and health**

**4 hrs**

- Definition, Characteristics, Elements and Types of culture
- Non-medical system (traditional practices) – strengths and weakness
- Role of indigenous healers in primary health care
- Self- medication and other prevailing health care practices in Nepal
  - Traditional and Alternative medicine
  - Homeopathic Medicine
  - Acupuncture acupressure
  - Ayurveda
  - Faith healers
  - Naturopath: Yoga, meditation, Reiki, use of herbs
- Cross- culture relationship in health care system with examples (economic, education, beliefs, etc.)
- Disease causation – Personalistic and naturalistic medical system
- Health and belief regarding different practices in different ethnic groups
- Relationship between Health and Culture

**Unit 4: Interpersonal relationship**

**4 hrs**

- Meaning and significance of the interpersonal relationship
- Meaning of nurse client relationship
- The physician- patient role relationship Model's Talcott Parson's sick role model
- Szasz - Hollander's sick role model
- Communication pattern between modern provider, consumers and indigenous providers
- Barriers on effective health care provider's consumer relationship
- Harassment in health care settings in relation with the care provider and consumers and its resolution. (modification of behavior and attitude of health care providers)

**Unit 5: Illness behavior and sickness role****2hrs**

- Introduction of illness behavior
- Suchman's Stages of illness behavior
  - The symptom experience stage
  - Assumption of sick role stage
  - The medical care contact stage
  - The recovery and rehabilitation stage
- Sickness role
  - The sick role: and introduction to illness as deviance and sickness as social deviance and being sick
  - The importance of the sick Role
  - The influence of sex, age, Ethnicity, race, economic and social class in relation to sick role.
  - Importance of social role in sickness

**Unit 6: Socio cultural and social problem****4 hrs**

- Definition, nature, factors and barriers of Socio-cultural change
- Meaning and causes of social problem
- Different Social problems: prostitution, Sexual harassment/ abuse, Alcoholism. Drug abuse, crime (stealing, robbery, gambling, murder, kidnapping), Suicide, child labor, human trafficking and its consequences in society and health
- Meaning, purpose of social control
- Different means of social control practices in Nepal – formal and informal

**Unit 7: Psychology applied to nursing****5hrs**

- Definition of psychology.
- Relationship between psychology, sociology and anthropology.
- Branches of psychology- educational, clinical, developmental & social psychology.
- Methods of psychology: Experimental, observational & clinical
- Study of behavior from different perspectives: Behavioral, biological, cognitive, social, cultural, developmental, humanistic, and psychoanalytic perspectives
- Relationship between brain, body and behaviour
- Importance of psychology in nursing.

**Unit 8: Sensation, attention and perception****2hrs**

- Definition of sensation, attention and perception
- Difference between sensation and perception
- Factors affecting perception (Subjective and objective)

- Perceptual errors: Hallucinations and illusions
- Types of attention
- Factors affecting attention (subjective and objective)

### **Unit 9: Emotion**

**4hrs**

- Meaning and nature of emotion
- Emotional development throughout lifespan
- Concepts of Emotional Intelligence
- Importance of emotional intelligence in Nursing
- Theories of emotion: James Lang theory, Cannon Bard, Schachter & Singer's
- Cognitive appraisal theory
- Effect of emotion on health.
- Importance of expression and control of emotion
- Measures to control emotion.

### **Unit 10: Motivation**

**4hrs**

- Definition: motive, motivation, drive
- Types of motive: Biological and Social
- Theories of motivation: Drive theory, incentive theory, optimal level and
- opponent process theories
- Role of motivation in learning and health education in relation to behavioral change.
- Motivation towards utilizing health facilities

### **Unit 11: Learning, intelligence and memory**

**4 hrs**

- Learning: Definition and types of learning i.e. conditioning, instrumental, trial and error and cognitive and insightful learning.
- Intelligence: Definition of intelligence and factors affecting intelligence.
- Intelligence test: Stanford-Binet Intelligence scale, Wechsler tests
- Categorization of people on the basis of I.Q. testing: Mental retardation.
- Memory: Meaning and factors affecting memory and forgetting.

### **Unit 12: Personality**

**4hrs**

- Definition and characteristics of personality
- Determinants of personality: Hereditary, psychological, sociological factors.
- Personality theories:
  - Sigmund Freud's psychosexual theory of development
  - Erik Erickson's psychosocial theory of development

- Piaget's cognitive theory
- Sullivan's interpersonal theory
- Assessment of personality
  - Observation
  - Questionnaire
  - Projective techniques: Rorschach inks blot technique, Thematic Apperception Test (TAT)

### **Unit 13: Frustration and conflict**

**4hrs**

- Definition of frustration and conflict.
- Sources of frustration: Environmental & Personal
- Types of conflict-
- Conflict resolution approach
  - Approach –Avoidance conflict.
  - Avoidance –Avoidance conflict
  - Measures to reduce stress: Relaxation, recreation, diversion, exercise and defense mechanism.
- Coping (Introduction, types of coping strategies)

### **Teaching and learning methods**

- Lecture methods
- Discussion
- Group work
- Individual work
- Virtual learning

### **Evaluation**

- Internal assessment 30%
- Final examination 70%

### **TEXTBOOKS**

- Indirani. TK. (2006). *Textbook of Sociology for Nurses*. New Delhi: Jaypee Brothers.
- Mangal. SK. (2008). *Abnormal Psychology*. India. Sterling Publishers Pvt. Ltd.
- Neeraja. KP. (2005). *Textbook of Sociology for Nursing Students*. New Delhi: Jaypee Brothers.
- Sreevani. R. (2012). *Psychology for Nurses. India*. Jaypee Brothers Medical Publishers Pvt, limited.



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- Anthikad. J. (2007). *Psychology for Graduate Nurses*. (4<sup>th</sup> edi). New Delhi. Jaypee brothers medical publishers (P) Ltd
- Barker. S. (2007). *Vital Notes for Nurses Psychology*. Blackwell Publishing Ltd.
- Barkway. P. (2009). *Psychology for Health Professionals*. ChurchillLivingstone. Elsevier.
- Charles. G. Morris. Albert A. Maisto, Misra. G. (2010). *Psychology for Nurses*. (India) Dorling Kindersley Pvt Ltd.
- Dominic. U. (2013). *Introducing Psychology for Nurses and healthcare Professionals* (2<sup>nd</sup> edi.), USA. Routledge. New York, NY 10017
- Goodman B. (2015). *Psychology and sociology in nursing* (2<sup>nd</sup> ed). India. SAGE publication limited in.
- Gross. R. & Kinnison. N. (2014). *Psychology for nurses and health Professionals* (2<sup>nd</sup> ed). CRC Press. Taylor and Francis Group.
- Gross. R. ( 2015). *Psychology: The science of Mind and Behavior* (7<sup>th</sup> ed). Hodder Education Group.
- Kutty. A.B. (2013). *Psychology for B.Sc. (Nursing)*. Delhi-110092. PHILearning private Limited..
- Rana. D. & Upton. D.( 2013). *Psychology for nurses*. Roulledge.
- Richard M. Ryckman. (2013). *Theories of personality* (10<sup>th</sup> ed). LindaSchreiber-Ganster Publisher.
- Stephen. B. (2014). *Psychology for Nurses*. Elsevier Health Sciences. APAC.
- Walker. J., Payne. S, Jarrett. N., Ley. Tim. (2012). *Psychology for Nurses and the caring professions* (4<sup>th</sup> ed) Open University press.

## **B.Sc Nursing Third Year**

BSN19	Prenatal Nursing (T)
BSN20	Prenatal Nursing (P)
BSN21	Labor and Childbirth (T)
BSN22	Labor and Childbirth (P)
BSN23	Postnatal Nursing (T)
BSN24	Postnatal Nursing (P)
BSN25	Gynecological Nursing (T)
BSN26	Gynecological Nursing (P)
BSN27	Child Health Nursing (T)
BSN28	Child Health Nursing (P)
BSN29	Psychiatric Nursing (T)
BSN30	Psychiatric Nursing (P)

### OVERVIEW OF THIRD YEAR B.SC NURSING COURSE

Code No	Name of the Courses	Total Hours	Marks
BSN19	Prenatal Nursing (T)	75	100
BSN20	Prenatal Nursing (P)	168 (4wks)	75
BSN21	Labor and Childbirth (T)	100	100
BSN22	Labor and Childbirth (P)	210(5wks)	100
BSN23	Postnatal Nursing (T)	75	100
BSN24	Postnatal Nursing (P)	168 (4wks)	75
BSN25	Gynecological Nursing (T)	50	50
BSN26	Gynecological Nursing (P)	126(3wks)	50
BSN27	Child Health Nursing (T)	100	100
BSN28	Child Health Nursing (P)	210(5wks)	100
BSN29	Psychiatric Nursing (T)	100	100
BSN30	Psychiatric Nursing (P)	210(5wks)	100
	<b>Total</b>	<b>Th= 500 hrs</b> <b>Pr= 1092</b> <b>1592</b>	<b>1050</b>

## Mode of assessment

Subject	Mode of Assessment						
	Theory			Practical			Grand total marks
	Internal Assessment	Final Assessment	Total Marks	Internal Assessment	Final Assessment	Total Marks	
Prenatal Nursing	30	70	100	37.5	37.5	75	175
Labor and child birth	30	70	100	50	50	100	200
Postnatal Nursing	30	70	100	37.5	37.5	75	175
Gynecological Nursing	15	35	50	25	25	50	100
Child Health Nursing	30	70	100	50	50	100	200
Psychiatric Nursing	30	70	100	50	50	100	200

## PRENATAL NURSING (THEORY)

<b>Course No:BSN19</b>	<b>Placement: Third year</b>
<b>Hours: 75</b>	<b>Marks: 100</b>

### Course description

This course is design to provide the in-depth knowledge to students in human reproduction, diagnosis of pregnancy and care of the mother during pregnancy. This course also provides the students to acquire the knowledge to identify the normal pregnancy as well as identification of risk pregnancy and referral as per the national protocol. The students will apply knowledge of maternal and fetal assessment and provide care/counseling to pregnant women and their families, in a culturally sensitive manner.

### Course objectives

**At the end** of this course, the students will be able to:

- Discuss the history of midwifery- national and international perspective.
- Review the anatomy and physiology of reproductive system of female.
- Explain of embryological changes occurring at various stages of pregnancy.
- Describe the Pre-conception care and its components including counseling.
- Identify the relationship of the fetus with the uterus and pelvis.
- Discuss the national safe motherhood programme.
- Discuss the physiological changes during pregnancy, its effect and management.
- Identify the sign and symptoms of pregnancy & calculate expected date of delivery and period of gestation.
- Explain the antenatal care including antenatal assessment.
- Discuss the minor disorders of pregnancy and its management
- Identify the major disorders of pregnancy and its management.
- Recognize the medical problems associated with pregnancy and its management.
- Explain the amniotic fluid disorders and its management.
- Identify the various drugs used in pregnancy.

### Course contents

#### UNIT 1: Introduction to Midwifery

**10 hours**

- Common terminologies used in midwifery
- History of Midwifery- International and national

- National SBA policies, strategies & core competencies
- Midwifery Regulation: ICM code of ethics,
- Legal aspects in midwifery
- Anatomy and physiology of female and male reproductive system including the hormonal influences.
- Obstetric first aid (OF)
- BEmONC ( Basic Emergency obstetric and Newborn care)
- CEmONC, (Comprehensive Emergency obstetric and Newborn care)

**Unit 2: The female pelvis and fetal skull**

**5 hours**

**Female Pelvis**

- Anatomy and physiology of pelvic bone
- Types and functions of pelvis
- Pelvic muscles, ligaments and joints
- Pelvic landmarks and measurements
- Abnormalities of pelvis and its effect on labor

**Fetal skull**

- Bones, landmarks and measurement
- Sutures & fontanel: types, functions and importance
- Feto-pelvic relationship and its significance

**Unit 3: Fertilization and Fetal Development**

**8 hours**

- Fertilization
- Implantation
- Embryonic period and Fetal development
- Development and functions of placenta, membranes, umbilical cord, amniotic fluid
- Anatomical variations and clinical significance of placenta and umbilical cord
- Amniotic fluids and its abnormalities with significance
- Fetal Circulation and adaptation after birth

**Unit 4: Preconception Care and Counseling**

**3 hours**

- Maturation of sex organs
- Secondary sexual characteristics
- Menstruation and menstrual hygiene
- Pre-conceptual care, components and counseling

**Unit 5 : Physiological changes during pregnancy in various system** **4 hours**

- Reproductive , Cardio vascular, Respiratory, Urinary, Musculo-skeletal, Gastro-Intestinal, Integumentary, Endocrine, Metabolism and weight gain

**Unit 6: Assessment of the women during Pregnancy** **10 hours**

- Diagnosis of pregnancy: presumptive, probable and positive signs
- Health belief and cultural practices during pregnancy in Nepal
- History taking: demographic and obstetric history
- Objectives, importance of antenatal care
- Estimated date of birth (EDD) and week of gestation, Neegle's rule
- Antenatal care based on WHO standards: follow up visits, risk assessment, birth preparedness and complication readiness, education and counselling
- Antenatal Examination: systemic, abdominal and vaginal examination
- Needs and advice for antenatal mother
- Routine laboratory investigations
- Referral and collaborative care for risk woman

**Unit 7: Assessment of Fetal wellbeing during pregnancy** **6 hours**

- Daily Fetal movement count (DFMC)
- Intermittent auscultation
- Cardiotocograph
- Biophysical profile
- Biochemical
- Radiological

**Unit 8: Disorders of Pregnancy** **13 hours**

- Hyperemesis gravidarum and its management
- Hypertensive disorders during pregnancy and their management according to national protocol (Skill practices on management of severe preeclampsia and Eclampsia), HELLP syndrome, PIH ( essential hypertension, gestational hypertension,
- Causes and management of bleeding during late pregnancy: Placenta previa, Placenta abruptio
- Amniotic fluid disorders ( Poly, Oligo, embolism) and its management
- Rh iso-immunization during pregnancy and its effect on the foetus.

**Common Minor disorders in Pregnancy**

- **Digestive system:** morning sickness, heart burn, ptylism, Indigestion, constipation, hemorrhoids, pica or food craving
- **Cardiovascular system:** supine hypotension, syncope/fainting, physiological edema
- **Genitourinary system:** frequency of micturition, urgency, leucorrhoea

- **Integumentary:** Itching or pruritus, chalosma
- **Nervous system:** carpel tunnel syndrome, Insomnia, hot flushes
- **Musculo-skeletal system:** backache, leg cramps
- **Respiratory system;** dyspnea, epistaxis

**Unit 9: Medical Disorder Associated with Pregnancy and its management      10 hours**

- Anemia
- Gestational Diabetes
- Renal Disease: UTI, pyelonephritis
- Cardiovascular disease: RHD
- Thyroid Disease: hyper and hypo thyrodism
- Sexually Transmitted Infections: HIV/AIDS and PMTCT, gonorrhea, syphilis, TORCH infection etc
- Jaundice and hepatitis
- Malaria
- Epilepsy

**Unit 10: Drugs used in Pregnancy      6 hours**

- Hematogenic agent Tocolytic agents
- Calcium supplementation:
- Teratogenic agents
- Anthelminthic:
- Pain relief analgesics
- Anticonvulsants: MgSO<sub>4</sub> and antidotes
- Antihypertensive drugs

**Teaching/learning methods**

- Lecture and discussion
- Brain storming
- Group work and presentation
- Role play
- Demonstration
- Video show
- Skill practices
  - Obstetric palpation

Counseling

**Evaluation**

**Internal assessment (30%): 30**

**Final examination (70%): 70** (Written examination)



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## PRENATAL NURSING (PRACTICUM)

<b>Course No:BSN2 0</b>	<b>Placement: Third year</b>
<b>Hours: 168</b>	<b>Marks: 75</b>

### Course description

This course enables students to apply knowledge of prenatal nursing theory course into practice in the clinical setting after a number of simulations in the midwifery skill lab in the care of woman with normal and abnormal pregnancy. It also helps students to develop competencies in applying lifesaving skills.

### Course objectives

At the end of the course, students will be able to:

- Communicate effectively with the pregnant woman and family.
- Take health history of the pregnant woman in detail.
- Calculate expected date of delivery (EDD) and period of gestation (POG).
- Perform head to toe examination including abdominal exam of the pregnant woman and monitor fetal growth.
- Prepare and perform antenatal screening tests
- Give health teaching to the pregnant women and family members regarding care during pregnancy and preparation for childbirth.
- Provide PMTCT/HIV counselling to pregnant women
- Identify and take appropriate action for the management of PIH, pre-eclampsia and eclampsia
- Identify and manage the pregnant women with medical complications
- Maintain proper documentation of the related cases

### Teaching learning activities

During the course, students will perform following activities:

SN	Learning outcome	Method of assessment	Minimum requirement of exposure	Evaluation
1.	Antenatal Assessment	OSCE	25	2
2	Health teaching to women and family	Bedside	10	1

		teaching and formal		
3	PMTCT counseling	OSCE	5	1
4	Identify deviated pregnancy	bedside	10	-
5	Case study on deviated pregnancy & presentation	Case/Viva	1	1
6	Log book	-	-	-

### **Evaluation**

#### **Internal Assessment (50%) = 50**

- Clinical performance =20
- Assessment of pregnant women = 10
- Health Education = 5
- Case study and presentation on deviated condition of pregnancy = 10
- PMTCT counseling = 5

#### **Final examination (50%):50**

- OSPE = 30
- Viva Voce = 20

## LABOR AND CHILD BIRTH (THEORY)

<b>Course No:BSN21</b>	<b>Placement: Third year</b>
<b>Hours: 100</b>	<b>Marks: 100</b>

### Course description

This course enables the students to acquire in-depth knowledge and skill required to provide intrapartum care of the women with normal labor and childbirth. It also includes identifying risk factors and deviations from normal progress.

### Course objectives

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

- Explain the normal labor, stages and onset of labor.
- Carry out comprehensive initial and on-going assessment in different stages of labor.
- Explain physiological changes during first, second and third stage of labor.
- Assess progress of labor by using partograph and other clinical skills.
- Explain the normal mechanism of labor.
- Demonstrate the obstetric emergencies and life saving measures.
- Performed active management of third stage of labor.
- Identify risk factors associated with labor and child birth.
- Explain the complications of different stages of labor and their management.
- Illustrate the care of neonate at birth.
- Discuss the causes, types, diagnosis, sign and symptoms and effects on labor and its management of various abnormal labor and uterine action
- Explain causes, sign and symptoms, management and effects on labor of different malposition and mal-presentations.
- Illustrate the causes, diagnosis, management and effects on labor of multiple pregnancy.
- Describe the obstetrics emergencies, their management and lifesaving skills.
- Describe the indications, procedures, management and complications of different operative procedure related to labor.

### Course contents

#### Unit 1: Normal labor and childbirth

**8 hours**

- Terminologies used in labor
- Definition: labour, normal labour and abnormal labour

- Sign and symptoms of true and false labor, difference between true and false labor
- Premonitory sign of labor
- Duration & stages of labour: First, second, third and fourth stage
- Causes of onset of labor
- Factors affecting labour
- Physiology of normal labor
- Pelvic floor muscles and ligaments
- Pain relief measures during labour

**Unit 2: First stage of labor**

**15 hours**

- Physiology of first stage of labor
- Normal mechanism of labor
- Assessing women in labor (history and physical assessment)
- Use of partograph; definition, importance, plotting partograph and identifying deviation and decision making
- Management of first stage of labour
- Per vaginal examination (Skill practice)
- Use of partograph and its importance in monitoring labour (skill practices)
- Danger signs during first stage of labour
- Maternal and foetal distress and its management

**Unit 3: Physiology and Management of Second Stage of Labour**

**18 hours**

- Physiological changes during the second stage of labour
- Sign and symptoms of second stage labour
- Mechanism of normal labour
- Management of woman during the second stage of labour
  - Preparation for delivery
  - Steps of conducting the vaginal delivery (skill practice)
  - Restricted episiotomy and its indications methods and technique of repair of episiotomy and tear (vaginal and cervical) (skill practice)
- Care of the neonate at birth
  - Adaptation of newborn in extra-uterine life
  - Neonatal resuscitation (helping the baby breath) (skill practice)
  - Describe the care after resuscitation
- Discuss the essential care of newborn
- Danger signs in labor
  - Prolonged latent phase
  - Non-progress of labor
  - Heavy show and bleeding in labor

- CPD in second stage of labor
- Compound presentation
- Heavy bleeding before and after birth
- Less or loss of fetal movements
- Birth injuries to baby

**Unit 4: Third and fourth stage of labor**

**8 hours**

- Physiological changes in third stage of labor: separation and descent of the placenta  
Mechanical factors and Hemostatic
- Active and physiological management of third stage of labor
- Assessment of blood loss
- Physiology of third stage of labour
- Active management of third stage of labour
- Importance of examination of genital tract and placenta, membranes and method of estimating blood loss (skill practice)
- Care of mother and new-born following delivery
- Recording and reporting of mother and new-born condition

**Unit 5: Malposition & Malpresentation**

**12 hours**

Discuss the malposition and mal-presentation of the foetus and their management

- Occipito posterior position, face presentation, brow presentation, Shoulder presentation
- Multiple pregnancy
- Transverse lie, unstable lie
- Breech presentation
- Technique of conducting breech delivery (skill practice)

**Unit 6: Obstetric Emergencies**

**18 hours**

- Obstetric emergencies and their life saving measures
  - Intra-partum and post-partum haemorrhage (skill practice)
  - Shoulder dystosia (skill practice)
  - Rupture of uterus
  - Inversion of uterus
  - Cord prolapsed
  - Shock
  - Vulval hematoma
  - Retained placenta: Manual removal of placenta (skill practice)

**Unit 7: Abnormal Labour**

**15 hours**

- Pre-term and post- term labour and their management.
- Premature rupture of membranes and pre-term premature rupture of membrane

- Abnormal uterine contractions and their effect on labour (hypertonic, hypotonic and in-coordinate)
- Precipitate labour
- Prolonged and obstructed labour
- Management of abnormal labour : Trial of labour, Caesarean section
- Demonstrate the procedure of vacuum delivery (skill practice)

### **Unit 8: Drugs used in Labour**

**6 hours**

- Drugs used in labor including their route, dose, actions, side effects and nursing considerations: (Oxytocin, Mesopristol, Carbaprostine, Epidocin, Buscopan, Methergin, Nefidipin, Salbutamol, Tramsemic acid, Xylocaine, Dexamethasone, Naloxone, Vitamin K, etc.)

### **Teaching /learning methods**

- Lecture and discussion
- Brain storming
- Group work and presentation
- Role play
- Demonstration
- Video show
- Skill practices on: conduct normal delivery, examination of perineal and cervical tear perform episiotomy and repair, partograph,
- Lifesaving skills:
  - Helping mother survive bleeding after birth(HMS/BAB): Bimanual compression, aortic compression, condom tamponade, management of shock
  - Helping the baby breath (HBB)
  - Vacuum extraction
  - Manual removal of placenta
  - Breech extraction
  - Management of Shoulder dystosia

### **Evaluation**

#### **Internal Assessment (30%): 30**

- Written exam (20), Simulation (10)

#### **Final Examination (70%): 70**

- Written exam

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## **LABOR AND CHILD BIRTH (PRACTICUM)**

<b>Course No:BSN22</b>	<b>Placement: Third year</b>
<b>Hours: 210</b>	<b>Marks: 100</b>

### **Course description**

This course provides the opportunity for the students to apply knowledge in developing skills and attitude in the clinical setting following simulation in the midwifery skill lab to care for women during labour and postnatal period. The course also enables students to manage women with abnormal labour. Students also develop competencies in providing emergency obstetric care and applying lifesaving skills as specified by the Government of Nepal in Skill Birth Attendants' core competencies.

### **Course objectives**

At the end of the course, students will be able to:

1. Communicate effectively with women and their family
2. Perform the admission procedure of woman in labor
3. Manage the Women in First Stage of labor
4. Manage the Women in second Stage of labor
5. Manage the Women in third and fourth Stage of labor
6. Manage the women in abnormal labor
7. Demonstrate the life saving measure in obstetric emergency
8. Maintain the record and report about labor and delivery
  
9. Provide health teaching to mothers and families

### **Teaching learning activities**

<b>SN</b>	<b>Learning outcome</b>	<b>Method of assessment</b>	<b>Minimum requirement of exposure</b>	<b>Evaluation</b>
1.	Admission women to labor	Case/OSCE/Viva	5	1
2	Ongoing assessment including history taking of woman in labor including	OSPE/Viva	5	-

	vaginal examination			
3	Normal delivery witness	Case	5	5
4	Conducting Normal Delivery	Case, OSCE, Viva	15	1
5	Plotting Partograph normal	OSPE/ Viva	5	1
6	Witness of abnormal deliveries	Case/ OSPE/ Viva		5
7	Performing episiotomies	Case/ OSPE/ Viva		1
8	Repairing perineal tears/ episiotomy	Case/ OSPE/ Viva	5	1
9	Conducting breech deliveries	Case, OSPE Viva	5	1 (skill lab)
10	Applying vacuum extraction	Case/ OSPE/ Viva	5	1 (Practice in skill lab)
11	Manual removal of placenta	Case/ OSPE/ Viva	5	1 (Practice in skill lab)
12	Helping baby breath	Case/ OSPE/ Viva	5	1 (practice in skill lab)
13	Management of shoulder dystocia	Case/ OSPE/ Viva	5	practicing in skill lab
14	Helping mother survive / Management of postpartum haemorrhage	Case/ OSPE/ Viva	5	practicing in skill lab
15	Vaginal examination performed	Case/ OSPE/ Viva	5	practicing in skill lab
16	Immediate newborn care provided	Case/ OSPE/ Viva	5	1
17	Immediate Newborn examination	Case/ OSPE/ Viva	5	-

18	Care of women during fourth stage of labor	Case/ OSPE/ Viva	5	-
19	Management of labor unit	Case/ OSPE/ Viva	5	1
20	Maintain log book			

## EVALUATION

### Internal Assessment (50%) = 50

- Evaluation of daily performance = 10
- Conduct normal delivery = 15
- Partograph = 5
- Record (witness, abnormal and normal) = 5
- Episiotomy & perineal repair =2.5
- Maintenance of log book/ Record =2.5
- Skill lab =10

### Final examination (50%): 50

- OSPE =30
- Viva Voce = 20

## POSTNATAL NURSING (THEORY)

<b>Course No:BSN23</b>	<b>Placement: Third year</b>
<b>Hours: 75</b>	<b>Marks: 100</b>

### Course description

This course is designed to provide in-depth knowledge of postnatal mother care, support, and management, as well as the baby's well-being after childbirth to 6 weeks postpartum. The students will also be able to deal with the problems and complications that may arise during the postpartum period collaboratively.

### Course objectives:

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

- Discuss normal physiological and emotional changes in postnatal period.
- Describe the nursing care needed for a postnatal mother and newborn.
- Identify common discomforts of postpartum mothers and take appropriate action.
- Explain the comprehensive postnatal and newborn assessment.
- Explain the danger signs of mother and newborn.
- State the minor and major disorders of puerperium and their management.
- Discuss the normal characteristic of newborn.
- Explain the how newborn adjust to extra-uterine life.
- Explain the newborn problems/complication and their management.
- Demonstrate the care of newborn baby.
- Explain the physiology and management of lactation.
- Discuss the various problems in breast and breast feeding.
- Describe Maternal Perinatal Death Surveillance Review and Review and Maternal and Perinatal Death Surveillance and Response.

### Course contents

#### Unit 1 : Puerperium and their management

**16 hours**

- Definition
- Physiological and psychological changes during puerperium
- Management of normal puerperium;
  - ✓ Aims, principle, Immediate and subsequent care
  - ✓ Postpartum exercise: upper and lower extremities, abdominal, deep breathing
  - ✓ Bonding and attachment
  - ✓ Postnatal family planning
  - ✓ Care and support to new family, involvement of family member in postnatal care

- ✓ Discharge teaching
- Physical Care: breast, perineal care
- Health education to postnatal mother and counseling
- Explain support for women and families experiencing bereavement
- Postnatal assessment: concept, importance and components
  - History taking
  - Assessment of postnatal mother and follow up visit

**Unit 2: Disorders during Puerperium**

**10 hours**

- **Minor disorders and their management**
  - After Pain
  - Hemorrhoids
  - Sub involution of uterus
  - Retention of urine
  - Fourth day blues
- **Major disorders of puerperium**
  - Puerperal sepsis
  - Puerperal haemorrhage (PPH)
  - Urinary tract infection
  - Obstetric Fistula and national guidelines
  - Thromboembolic diseases (thrombosis/thrombophlebitis and pulmonary embolism)
  - Postpartum eclampsia
  - Postpartum mental disorders (Postpartum depression and psychosis)

**Unit 3: Care of the Newborn**

**14 hours**

- Definition and general characteristics of newborn with common variations
- Physiological changes in newborn (adaptation to extra uterine life)
- APGAR score
- Neonatal health status, policies and strategies
  - Role of health care providers in different health care facilities
- **Essential newborn cares**
  - Immediate new born care and assessment
  - Danger signs of newborn
  - Care of newborn during 2- 28 days
  - Teaching and counseling about newborn care
  - Newborn resuscitation
  - Physical care: eye care, umbilical cord care, sponge bath, full bath etc

**Unit 4: Breast Feeding Initiation**

**10 hours**

- Physiology of lactation
- Initiation and management of breast feeding : Benefits to mother and baby
- Promotion of successful breastfeeding
  - Baby friendly hospital

- Exclusive breastfeeding
- Technique of breastfeeding
- Support and advice to mother
- Expressing and storing breast milk
- Cup and spoon feeding
- **Breastfeeding among HIV and HbsAg positive mothers**
  - Risk of HIV transmission through breastfeeding
  - Benefits of exclusive breastfeeding for the first six months
  - Role of the health care provider in counseling an HIV positive mother
  - Post-exposure prophylaxis with ARVs for the HIV exposed infant and HIV testing in infants
- Alternative feeding

**Unit 5: Breast Feeding Problems and their Management**

**6 hours**

- Sore/cracked nipple
- Flat, depress & inverted nipple
- Plugged milk tube (blocked ducts)
- Engorgement of breast
- Mastitis
- Inadequate breast milk
- Breast abscess
- Alternative feeding for cleft lip and palate
- Suppression of lactation for loss of the baby

**Unit 6: Newborn Problems and their management**

**13 hours**

- **Minor problems of newborn**
  - Feeding problems
  - Sticky eyes
  - Sore buttock (diaper rashes)
  - Skin rashes
  - Umbilical infection
  - Thrush
  - Dehydration fever
  - Physiological jaundice
  - Vomiting
  - Engorged breast
  - Pseudo-menstruation
- **Major problems of newborn**
  - Pneumonia

- Birth asphyxia
- Meconium aspiration syndrome
- Convulsion
- Jaundice within 24 hours
- Sepsis, Ophthalmia neonatorum
- Hypothermia/ hyperthermia
- **Common birth injuries**
  - Skull injuries
  - Soft tissue injuries
  - Nerve injuries
  - Fracture bone
- **Low birth weight babies**
  - Characteristics of prematurity and dysmaturity and their management
  - Kangaroo mother care (KMC)
- **Newborn danger signs and referral**
- **Congenital malformations (review) and Still birth**
  - Gastro intestinal: cleft lip & palate, esophageal & duodenal atresia, pyloric stenosis, omphalocele, Hirschsprung's disease, ano-rectal malformation.
  - Central Nervous System: hydrocephalus, microcephaly, anencephaly, spinal bifida and meningocele
  - Musculoskeletal:
  - Chromosomal disorders: Down's syndrome
  - Non-immune fetal hydrops (NFH)

**Unit 7: Maternal, Perinatal Death Surveillance and Review**

**6 hours**

- Maternal, Neonatal and perinatal death review
- Bereavement and loss
- Perinatal and maternal mortality audit
- Care of the deceased
- Documentation
- National Protocol of Maternal Perinatal Death Review (MPDR) /Maternal Perinatal Death Surveillance and Response (MPDSR)

**Teaching /learning methods**

- Lecture and discussion
- Brain storming
- Group work and presentation
- Role play
- Demonstration
- Video show

- Skill practices on Post natal assessment, Neonatal assessment, Perineal care, Baby bath (sponge bath / full bath), Breast feeding

## Evaluation

- **Internal Assessment (30%):** 30 written exam
- **Final Examination (70%):** 70 Written exam

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## POSTNATAL NURSING (PRACTICUM)

<b>Course No:BSN24</b>	<b>Placement: Third year</b>
<b>Hours: 168</b>	<b>Marks: 100</b>

### Course description

This course provides the opportunity for the students to apply knowledge in developing skills and attitude in the clinical setting following simulation in the midwifery skill lab to care for women during postnatal period. The course also enables students to manage women with abnormal labour. Students also develop competencies in providing emergency obstetric care and applying lifesaving skills as specified by the Government of Nepal in Skill Birth Attendants' core competencies.

### Course objectives

At the end of the course, students will be able to:

- Perform the care of postpartum mother.
- Assist in successful breast-feeding.
- Assess and identify the problems in postpartum mothers and manage appropriately.
- Identify the major disorders of the mother during the post partum period and intervene appropriately
- Perform daily assessment of the newborn baby and provide care accordingly
- Provide care to the women with special needs during the postpartum period
- Provide health teaching to mothers and families

### Teaching learning activities

SN	Learning outcome	Method of assessment	Minimum requirement of exposure	Evaluation
	Postnatal examination	Case/ OSPE/ Viva	5	1
	Neonatal examination	Case/ OSPE/ Viva	5	1
	Breastfeeding procedure	Case/ OSPE/ Viva	5	1
	Perineal care	Case/ OSPE/ Viva	5	1
	Baby bath (Sponge bath after 24 hour of birth / Full bath in	Case/ OSPE/ Viva	2	1 (practice in skill lab )

	skill lab)			
	Counseling given on postpartum contraception	Case/ OSPE/ Viva	5	-
	Daily newborn assessment and care provided	Case/ OSPE/ Viva	5	1
	Identify danger signs of mother and newborn	Case/OSCE	5	-
	Maintain log book			

## Evaluation

### Internal assessment: 50

- Evaluation of daily performance = 15
- Performing postnatal procedure (pericare, baby bath(full/partial) = 10
- Postnatal Assessment = 5
- Breast feeding (technique and care) = 5
- Neonatal Examination = 5
- Health teaching = 5
- Log book = 5

### Final examination: 50

- OSCE/OSPE =30
- VIVA = 20

## GYNECOLOGICAL NURSING (THEORY)

<b>Course No:BSN2 5</b>	<b>Placement: Third year</b>
<b>Hours: 50</b>	<b>Marks: 50</b>

### Course description

This course facilitate student in-depth knowledge in gynecological problems and enable students to apply knowledge and skill in providing related to the care of the women with various Gynecological problems in different settings.

### Course objectives

Upon the completion of the course, students will be able to;

- Describe the preparation, procedure, complications and nursing consideration of different diagnostic procedures used in gynae.
- Demonstrate advanced skills/competence in managing patients in different reproductive and gynecological disorders following nursing process approach and explain preventive measures and therapeutic approaches of these disorders.
- Discuss the causes, types, clinical features, diagnostic evaluations, management including nursing consideration of menstrual disorders.
- Identify the common breast disorders and their management.
- Discuss the common pelvic infections and their management.
- Discuss the organism, transmission, clinical features, stages, test, treatment and nursing consideration of common STIs.
- Discuss the causes, types, clinical features, diagnostic evaluation, management of congenital malformation of reproductive system.
- Describe the common terminologies, types, causes, diagnostic investigations and treatment modalities of infertility.
- Explain the problems of displacement and fertility.
- Discuss the common gynecological neoplasm and their management.

### Course contents

#### Unit 1: Gynecological Assessment and Procedures

**5 hours**

- History taking
- Physical examination/gynecological examination
- Diagnostic Procedures
  - Pap Smear/VIA/Hysterosalpingography/Hysteroscopy
  - Colposcopy/Mammography/laparoscopy
  - Cervical and endometrial biopsy/Fine needle aspiration cytology
  - Semen analysis, cervical, vaginal discharge for culture and sensitivity test
  - Tumor marker test

**Unit 2: Menstrual Disorders** **7 hours**

- Premenstrual syndrome, Dysmenorrhea
- Dysfunctional Uterine bleeding
- Amenorrhea ,Oligomenorrhea, Hypomenorrhea, Polymenorrhea
- Menorrhagia, metroragia
- Post-menopausal bleeding
- Climacterium and menopause

**Unit 3: Infections and Inflammations of Reproductive Organs** **11 hours**

- Infection of external female genitalia and its management ( Vulvitis, Bartholin's cyst , abscess)
- Infection of internal reproductive organs and its management (Vaginitis, Cervicitis, Endometritis, Salpingitis)
- Pelvic abscess, genital tuberculosis
- STI; concept, risk factors, prevention, investigations
  - Bacterial: Bacterial vaginosis, chlamydia, Gonorrhoea, syphilis
  - Virus: Genital warts/HPV, Herpes simplex/ Molluscum Contagiosum/ HIV AIDS
  - Parasite: Pubic lice/ Trichomoniasis/ Scabies
  - Fungus: Yeast
- TORCH Infection

**Unit 4: Congenital Malformation of Genital Tract** **5 hours**

- Hydronephrosis
- Vaginal abnormalities and its management :Imperforate hymen atresia, agenesis
- Cervical abnormalities :Cervical agenesis, cervical incompetent, hypoplasia, stenosis
- Uterine malformation: Bicornuate uterus

**Unit 5: Uterine Displacement** **5 hours**

- Pelvic organ prolapse: Rectocele, cystocele, urethrocele
- Uterine prolapse
- Vaginal vault prolapse
- Genital fistula: Recto-vaginal fistula, vesico-vaginal fistula, Urethro-vaginal fistula
- Urinary Incontinence

**Unit 6: Problems with Fertility** **5 hours**

- **Male and Female subfertility**
  - Definition
  - Causes/ factors
  - Diagnostic options
  - Treatment Options with nursing management
  - Assisted Reproduction

**Unit 7: Neoplasm of the Reproductive Organs** **6 hours**

- Gestational Neoplasm: overview, Choriocarcinoma

- Cervical cancer
- Fibroids uterus
- Ovarian cancer
- Endometriosis
- Vaginal cancer
- Breast : mastalgia, benign (lump, cyst and fibroadenoma) and malignant
- Nursing care of patient with radiotherapy and chemotherapy

**Unit 8: Abortion**

**6 hours**

- Abortion , types, causes and its management
- Abortion act of Nepal
- Safe abortion services (SAS): Comprehensive abortion care (CAC), Post abortion care/ Manual vacuum aspiration (skill practice)

**Teaching/ learning methods**

- Lecture and discussion
- Brain storming/ Group work and presentation
- Demonstration/ Video show
- Skill practices
  - Manual vacuum aspiration
  - Breast examination
  - Pelvic examination

**Evaluation**

- Internal (30%): 15 written exam
- Final Examination (70%): 35 written exam

**REFERENCES**

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5. WHO. Guidelines for the management of symptomatic sexually transmitted infections, 2021
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## GYNECOLOGICAL NURSING (PRACTICUM)

<b>Course No:BSN26</b>	<b>Placement: Third year</b>
<b>Hours: 126</b>	<b>Marks: 50</b>

### Course description

This course enables students to apply knowledge of gynecological nursing theory in providing care to clients with various gynecological conditions and to develop the skills needed to manage those clients. It also helps students to develop competencies in applying lifesaving skills.

### Course objectives

Upon the completion of this course students will be able to;

- Identify the common gynecological problems.
- Take gynecological history of clients in detail.
- Perform gynecological examination of women with different gynecological problems
- Apply the concept of nursing theories and communication while providing care to the clients.
- Utilize the knowledge of diagnostic procedures and observe/assist/perform pelvic, bimanual, speculum examination, Pap smear test or VIA.
- Conduct health teaching to the client and family.
- Perform/assist in manual vacuum aspiration (MVA)
- Provide/assist in post abortion care and comprehensive abortion care
- Perform breast examination

### Teaching learning activities

SN	Learning outcome	Method of assessment	Minimum requirement of exposure	Evaluation
1	Gynecological assessment	Case/ OSPE/ viva	5	1
2	Observed and assist and perform gynaecological procedure	Case/ OSPE/ Viva	1	
3	Perform breast examination to women	Case/ OSPE/ Viva	5 cases	1

4	Teach self-breast examination	Demo	5 cases	-
5	Perform pelvic examination in gynae OPD / ward	Case/ OSPE/ Viva	5 cases	1
6	Perform/Assist Manual vacuum aspiration (MVA)	Viva	1	1(practice in skill lab)
7	Provide/assist in post abortion care and comprehensive abortion care	Case/ viva	1	1
8	Assist, carryout / observe different gynecological procedure	Case/ OSPE/ Viva	5	1

## EVALUATION

### Internal assessment (50%): 25

- Evaluation of clinical performance = 10
- Case study & Presentation = 7.5
- Examination of breast and pelvic = 2.5
- Assist in gynecological diagnostic procedure = 2.5
- Health teaching = 2.5

### Final examination (50%): 25

- Viva

## CHILD HEALTH NURSING (THEORY)

<b>Course No:BSN27</b>	<b>Placement: Third year</b>
<b>Hours: 100</b>	<b>Marks: 100</b>

### Course description:

This course introduces students basic knowledge on care of children's from birth to adolescence as a unique individual. It focuses on the growth and development of children and managing the childhood disorders in the hospital and community settings. It will enhance student's knowledge and skill relevant to their professional roles in meeting the health care needs of sick and well children.

### Course objectives:

Upon the completion of the course, students will be able to;

- Explain the terms and concept used in child health nursing.
- Discuss the process of growth and development with health promotional activities including social and behavioral problems of children from birth to adolescence.
- Perform history taking and physical examination of children
- Describe the care of children with different pediatric procedures.
- Recognize emergencies from neonates to adolescence and take appropriate first aid measures.
- Explain various medical and surgical problems from newborn to adolescence.
- Explain nursing management of children having different body system disorders using nursing process.
- Explain the role of the nurses in reducing and managing stressful and crisis events in children.

### COURSE CONTENTS

#### Unit 1: Introduction to Pediatric Nursing

**3 hours**

- Common terminologies : neonate, infant, toddler, preschool, school age, adolescence, child, child health/pediatric, child health nurse, child health nursing/pediatric nursing, pediatrician,
- Difference between child and adult
- Philosophy of Pediatric Nursing Care
- Quality and Role of a nurses : caring for children in hospitals and home setting

#### Unit 2: Trend and Indicators of child health

**4 hours**

- Historical overview of child care practice International and National



- Trends and Issues in Child Health
  - Ethical Issues in child health care
- Indicators: Uses of indicators
  - Morbidity Indicators
  - Mortality Indicators
  - Nutritional Status Indicators

**Unit 3: Child Welfare Programme**

**8 hours**

- IMCI / IMNCI /CBIMNCI/FBIMNCI/ CBNCP
- Sustainable development goal (focusing in child health)
- National Nutritional Programs for children
- Child abuse: physical, emotional, sexual
- Child to child programme
- Childs Rights
- Under Five Clinic/Well baby Clinic
- Play and Play Therapy

**Unit 4: Growth and Development of Children**

**8 hours**

- Definition & concepts of growth and development
- Principles of growth and development
- Factors influencing growth and development
- Newborn: extra-uterine adjustment, physiological changes, newborn characteristics and essential newborn care
- Physical, physiological, social, psychological and emotional development at different stages of children from infant to adolescents
- Developmental mile stones and tasks from newborn to adolescence
- Promotion of optimum growth and development from newborn to adolescence
- Behavioral problems of children in different age groups
- Parental concerns and counseling

**Unit 5: Pediatric Nursing procedure**

**14 hours**

- History taking
- Physical examinations: including newborn examination
- Admission and discharge procedure
- Administrations of Medications : Oral, I.V, local, IT, IM, SC, ID (review and focus on pediatrics)
- Oxygen and other inhalations
- Providing nutritional need of the children (NG, gastrostomy tube insertions & feeding, IVfluid, blood transfusion)
- Assisting with invasive procedure (LP, IV puncture, NG tube insertions & feeding)
- Restraining and positioning
- Pediatric investigations and nurse's role

- Care of neonate in radiant warmer, incubator, phototherapy, exchange blood transfusion
- New born Resuscitation (Helping baby breath of newborn)
- Cardio Pulmonary Resuscitation: infant, child
- 

**Unit 6: Care of children with hospitalization, chronic and critical illness 4 hours**

- Communication with child and their family
- Stress of illness and hospitalization
- Care of children with life threatening illness, chronic illness
- Parental coping with impending death of children
- Nurses role in crisis management
- Nurses role in stress management of parents and children

**Unit 7: Neonatal Problems and management 8 hours**

- Common minor problems of neonate: (Physiological jaundice, Vomiting, Sore buttocks, Oral thrush, Constipation, Feeding problems, Excessive crying, Caput succedaneum, Skin rashes, Umbilical infection, Eye infection, )
- Major health problems: Asphyxia Neonatrum, Respiratory Distress Syndrome, Meconium aspiration syndrome, , Pathological jaundice, Neonatal Sepsis, Sudden Infant death Syndrome, Sleep Apnea, Cephalohematoma, Hypothermia (KMC), Hyperthermia, Hypoglycemia
- Danger signs of newborn
- Prematurity and Low birth weight baby

**Unit 8: Care of Children with Respiratory Disorders 5 hours**

- Upper Respiratory Infections : Common cold, pharyngitis, tonsillitis, sinusitis, croup syndrome, diphtheria, whooping cough, measles
- Lower Respiratory Infections: Pneumonia (CB-IMNCI), bronchial asthma, bronchiolitis &, tuberculosis

**Unit 9: Care of Children with Gastro-Intestinal Disorders 6 hours**

- Diarrhea/dehydration, Dysentery (CB-IMNCI)
- Worm infestations/ infections, Mal-absorption-syndrome
- Intestinal Obstruction, intussusceptions, umbilical hernia
- Congenital defects (Cleft Lip and Cleft palate, Pyloric stenosis, Oesophageal atresia and tracheo-esophageal fistula, Hirschsprung's diseases, Ano-rectal malformation
- Nutritional deficiency: Protein Energy malnutrition, Vitamin Deficiency

**Unit 10: Care of Children with Cardio Vascular and Blood Disorders 8 hours**

- Rheumatic fever and rheumatic heart disease
- Congenital Heart disease: Cyanotic and Acyanotic

- Anemia, Thalassemia, Leukemia, Lymphoma (Hodgkin's, non-hodgkin's disease), Idiopathic Thrombocytopenic Purpura (ITP), Hemophilia

**Unit 11: Care of Children with Genito-Urinary Disorders** **6 hours**

- Urinary tract Infection, Urinary calculi
- Glomerulonephritis, Nephrotic syndrome
- Renal failure
- Wilms' tumour
- Urogenital defects: Agenesis, micropenis, hypospadias, epispadias, hydrocele, and undescended testis

**Unit 12: Care of Children with Endocrine Disorders** **6 hours**

- Dwarfism, Gigantism, Diabetes insipidus
- Juvenile Diabetes mellitus,
- Cushing syndrome, Addison's disease, Precocious puberty
- Hyper and hypothyroidism and Cretinism

**Unit 13: Care of Children with Musculo-Skeletal Disorders** **6 hours**

- Congenital defects: Clubfoot, Dysplasia of hip joint, spinal cord deformity (scoliosis/lorodosis/kyphosis)
- Rickets
- Cerebral Palsy, GullianBarre syndrome
- Muscular Dystrophies

**Unit 14: Care of Children with Neurological Disorders** **6 hours**

- Meningitis, Encephalitis, Tetanus
- Neural tube defect, Hydrocephalus, Anencephaly
- Febrile convulsions, Epilepsy
- Head injuries, Neuroblastoma
- Downs syndrome, Mental retardation

**Unit 15: Care of Children with Eye, ENT, Skin and Dental Disorders** **8 hours**

- Congenital cataract, Squint, Vision defect, Conjunctivitis
- Otitis media, hearing loss
- Epistaxis, Deviated nasal septum
- Foreign body in: eye, ear, nose, throat
- Scabies, Impetigo, Boils
- Speech problems
- Malocclusion, Dental caries
- Burn

**TEACHING /LEARNING METHODS**

- Interactive lecture

- Individual assignment
- Group work and presentation
- Demonstration
- Simulation
- Problem Based Learning (PBL)
- Work shop
- Field Trip
- Exhibition
- Virtual Learning

## EVALUATION

- **Internal assessment (30%):** 30, written exam
- **Final (70%):** 70, written exam

## REFERENCES

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10. Singh, Meharban. (2018).*Paediatric clinical method (5<sup>th</sup> edition)*.India: CBC. Ltd.

## CHILD HEALTH NURSING (PRACTICUM)

<b>Course No:BSN28</b>	<b>Placement: Third year</b>
<b>Hours: 210</b>	<b>Marks: 100</b>

### **COURSE DESCRIPTION: T**

his practicum course offers students the opportunity to apply knowledge in developing skills and attitude in the care of newborns and children during illness as well as well condition. This course also provides opportunity in developing in-depth understanding about the various disease conditions of children.

### **COURSE OBJECTIVES:**

Upon completion of this course, students will be able to:

- Perform admission and discharge procedure of children by following the hospital's rules and policy.
- Apply knowledge of growth and development while caring different age group children.
- Assess the physical growth and developmental milestones from infancy to adolescence.
- Assess the needs of children of various age groups from newborn to adolescence having different problems.
- Prepare and implement nursing care plans according to the needs of the children.
- Provide comprehensive care to the normal as well as sick children.
- Develop competency in various pediatric nursing procedures.
- Assist parent/care giver in meeting the physical and psychological needs of the children.
- Perform paediatric resuscitation.
- Provide psychological support to the children and their families.
- Provide formal and informal health teaching to child and parents/care givers for prevention of illness and promotion of health of child.

### **TEACHING LEARNING ACTIVITIES**

<b>SN</b>	<b>Learning outcome</b>	<b>Method of assessment</b>	<b>Minimum requirement of exposure</b>	<b>Evaluation</b>
1	Pediatric assessment	Case/ OSPE/ viva	5	1
2	In-depth case study and case presentation	Case/ OSPE/	-	1

		Viva		
3	Exhibition on relevant topics like play materials, developmental milestones, supplementary nutrition	OSCE/Viva/Exhibition	-	1
4	Assist and perform procedures specific to pediatric	Demo/case/OSCE	-	Log book signature

## EVALUATION

### Internal assessment (50%): 50

1. Clinical Performance Evaluation = 10
2. Health Assessment (newborn/child) = 10
  - History taking
  - Physical examination
  - Growth and development assessment
3. Health Teaching (1) = 5
4. Case study & presentation (1) = 5
5. Paediatric resuscitation = 5
6. Paediatric procedures = 5
7. Exhibition (play material/supplementary nutrition) = 10

### Final examination (50%): 40

1. OSPE 30
2. VIVA Voce 20

## PSYCHIATRIC NURSING (THEORY)

<b>Course No:BSN29</b>	<b>Placement: Third year</b>
<b>Hours: 100</b>	<b>Marks: 100</b>

### COURSE DESCRIPTION

This course introduces students the concepts and principles of psychiatric nursing. It has incorporated the course related to signs and symptoms, causes, treatment and nursing management of common psychiatric disorders. It also emphasizes on the roles and responsibilities of psychiatric nurses in providing psychiatric nursing services to the client/family in various health care settings.

### COURSE OBJECTIVES

At the end of the course, the student will be able to:

1. Trace the historical perspective of psychiatry and psychiatric nursing.
2. Identify the classification systems used for mental health disorders
3. Discuss the importance of therapeutic relationships in caring for clients with psychiatric problems.
4. Describe the mental health assessment of psychiatric clients.
5. Describe different psychiatric disorders and their management
6. Explain the common psychosomatic disorders, substance and alcohol related disorders and their management.
7. Discuss about the different psychiatric problems among the children and elderly.
8. Explain the common treatment modalities for psychiatric illnesses.
9. Describe about the different psychiatric emergencies and their management.
10. Explain the legal aspects of psychiatric nursing.

### COURSE CONTENTS

#### Unit 1: Introduction

**10hours**

- Mental Health -- Terms used in mental health Nursing
- Characteristics of mentally healthy person
- Principles of mental health nursing
- Misconceptions of mental illness
- Issues and trends in Mental Health Nursing
- Historical development of mental health Nursing ( World and Nepal )
- Roles/functions of mental health nurse in various settings
- Classification of mental disorders

- DSM -5 (Diagnostic and Statistical manual of Mental Disorder fifth edition)
- ICD -11 (International Classification of mental and behavior disorder)

**Unit 2: Mental Health Assessment**

**7 hours**

- Mental Status Examination
- Mini Mental status Examination
- Physical Examination
- Neurological Examination
- Investigation in psychologies
- Psychological test( review from psychology & sociology)
- Investigations :Lab, EEG,CT & MRI
- Roles of nurse in psychological investigations

**Unit 3: Therapeutic Relationship and Communication**

**7 hours**

- Definition: Therapeutic communication, therapeutic nurse-patient relationship, Process recording
- Principles and characteristics of therapeutic communication
- Techniques of therapeutic communication
- Types of relationship
- Goals and phases of therapeutic relationship
- Phases and tasks of therapeutic relationship
- Therapeutic impasses and its intervention
- Purposes and uses of process recording

**Unit 4: Development of Personality and Defense Mechanism**

**5 hours**

- Introduction to Personality and its development
- Personality Development Theory by (Review)
  - Sigmund Freud
  - Erik Erikson
  - Jean Piaget
  - Sullivan
- Relevance of Theories of Personality Development in Mental health Problems
- Defense Mechanism (Introduction, classification, types)
- Clinical Relevance of different types of defense mechanism

**Unit 5: Thought Disorders (Schizophrenia)**

**4 hours**

- Introduction to Thought Disorder Psychotic Disorder (Overview) Schizophrenia
- Signs and Symptoms
- Aetiology
- Diagnosis
- Treatment and Nursing Management
  - Acute and Transient Psychotic Disorder (Brief Psychotic Disorder)



**Unit 6: Mood / Affective Disorders and Their Management** **4 hours**

- Introduction of Mood/Affective disorders
- Types of Mood Disorders
  - Depressive Disorders
  - Bipolar Mood Disorders
  - Persistent Mood Disorders
- Signs and symptoms, Aetiology, Diagnosis, Treatment and Nursing management of different types of mood disorder

**Unit 7: Neurotic and Stress-related Disorders and Their Management** **6 hours**

- Overview of Neurotic Disorders
- Types of Neurotic and Stress-related Disorder
  - Generalized anxiety disorder
  - Panic anxiety disorder
  - Phobic Anxiety Disorder
  - Dissociative and Conversion disorder
  - Obsessive compulsive neurosis
  - Adjustment Disorder
  - Post-traumatic stress disorder
- Signs and symptoms, Aetiology, Diagnosis, Treatment and Nursing management of different types of neurotic disorders

**Unit 8: Personality Disorders and Their Management** **4 hours**

- Etiology, clinical manifestation, diagnostic criteria, treatment and nursing management
  - Classification according to DSM-5
  - Cluster A
  - Cluster B
  - Cluster C

**Unit 9: Psychosomatic Disorders** **3 hours**

- Introduction to psychosomatic disorders (Mind-body relationship)
- Different Types of Psychosomatic Disorder
  - Bronchial asthma
  - Peptic ulcer
  - Ulcerative colitis
- Psychological Interventions in Psychosomatic Disorders
- Nursing management and counselling for psychosomatic disorder

**Unit 10: Psychiatric Disorders related to Women and Fertility****3 hours**

- Introduction to women's mental health
- Premenstrual syndrome
- Perinatal Psychiatric Disorder
  - Postnatal Blues
  - Postnatal Depression
  - Postnatal Psychosis
- Peri-menopausal syndrome
- Signs and Symptoms, Causes, Treatment and Nursing Management of Women's Mental health problems

**Unit 11: Substance and Alcohol Related Disorders****10 hours**

- Terms related to substance abuse
- Overview of Substance Related Disorders and Potential substance of abuse
- Causes of Substance Abuse
- Common Substance Abuse Disorders
  - Alcohol related disorders
  - Opioids related disorders
  - Cannabis related disorders
- Signs and Symptoms, Treatment and nursing management related to withdrawal, intoxication and dependence of common substance abuse disorders
- Prevention of Substance abuse related problems at different level
- Motivational Interviewing and Relapse Prevention

**Unit 12: Childhood Psychiatric Disorder****8 hours**

## Psychiatric Disorders of Early Childhood

- Separation Anxiety Disorder
- Temper tantrum
- School Phobia
- Sibling Rivalry
- Autism
- Enuresis/ Encopresis
- Mental Retardation
- Sleep Disorder (Nightmare and Night Terror)

## Psychiatric Disorders of Late Childhood and Adolescents

Signs and Symptoms, Aetiology, Treatment and Nursing Management of these childhood disorders:

- Attention deficit, hyperactivity disorder, Conduct Disorder
- Eating Disorder: Anorexia Nervosa, Bulimia Nervosa

### **Unit 13 Psychosexual Disorder**

**2 hours**

- Introduction and Types of Psycho-sexual disorders
- Gender Identity Disorder
- Paraphilia
- Sexual Dysfunction

### **Unit 14: Legal Aspects of Mental Health Nursing**

**4 hours**

- Introduction to legal and ethical aspects in psychiatric nursing
- Admission and discharge procedure in psychiatric nursing
- Rights of mentally ill patients
- Mental health policy
- Mental Health Act
- Nurses' roles and responsibilities with legal aspects of mental health

### **Unit 15: Psychiatric Emergencies**

**5 hours**

- Introduction to Psychiatric Emergencies
- Types of psychiatric emergencies
  - Excitement and violence
  - Stupor/ Catatonia
  - Attempted suicide
  - Panic attacks
  - Dissociative Convulsion
  - Neuroleptic malignant Syndrome (NMS)
  - Lithium toxicity
  - Drug and alcohol withdrawal
- Treatment and Nursing Management of common psychiatric emergencies

### **Unit 16 Counselling**

**5 hours**

- Introduction to Counselling (Meaning, how it differs with Guidance and psychotherapy)
- Elements/ Principles of counseling
- Stages of Counseling
- Step by step Counseling Process

## **Unit 17: Treatment Modalities in Mental Health Nursing**

**10 hours**

### **Somatic Therapy**

- Electro-convulsive therapy
- Trans-cranial magnetic stimulation

### **Psychopharmacological Therapy**

- Antipsychotic Drugs
- Antidepressant Drugs
- Mood Stabilizers/ Antimanic Drugs
- Anti-anxiety Drugs

### **Psychosocial Therapy**

- Individual Therapy
  - Interpersonal Psychotherapy
  - Psychoanalytic Psychotherapy
  - Cognitive Behavioural therapy
  - Behavioural Therapy
- Occupational Therapy
  - Recreational therapy
  - Vocational Therapy
- Abreaction Therapy
- Restraining
- Milieu Therapy
- Crisis Intervention
- Psychological First Aid
- Nursing care management related to different therapies

## **Unit 18: Community Mental Health Nursing**

**3 hours**

- Definition of community mental health
- Importance of community mental health
- Institutionalization versus De institutionalization
- Public health model of care:
  - Primary prevention
  - Secondary Prevention
  - Tertiary prevention
- Role of nurse in community mental health programs.

### **TEACHING/LEARNING METHODS**

- Lecture/Discussion
- Problem based learning

- Self-directed Learning
- Group projects/presentation
- Internet Resources
- Observation visit to various mental health related health agencies
- Clinical posting\experiences in OPD, inpatient department.

## **EVALUATION**

- **Internal assessment (30%): 30**
- **Final examination (70%): 70** (Written examination)

## **REFERENCES**

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## PSYCHIATRIC NURSING (PRACTICUM)

<b>Course No:BSN30</b>	<b>Placement: Third year</b>
<b>Hours: 210</b>	<b>Marks: 100</b>

### COURSE DESCRIPTION

This course offers the students an opportunity to apply principles of psychiatric nursing in providing holistic nursing care to the psychiatric patients and their families. This course also helps to develop skills of conducting therapeutic counselling.

### COURSE OBJECTIVES

At the end of this course, the students will be able to:

1. Provide care to patients/families with Psychiatric problems using the nursing process.
2. Perform history taking and mental status examination of Psychiatric clients.
3. Prepare nursing care plans according to the individual needs.
4. Plan and provide health teaching according to need.
5. Communicate effectively with client/family focusing on their special needs
6. Conduct therapeutic sessions with clients and families.
7. Counsel the clients and families with Psychiatric problems
8. Find out the strategies used in treatment of methods

### TEACHING LEARNING ACTIVITIES

SN	Learning outcome	Method of assessment	Minimum requirement of exposure	Evaluation
1.	Mental Status Examination	OSCE	5	2
2	Nursing care plan	Case report	5	1
3	Therapeutic Counseling	OSCE	5	1
4	Observation visit to specific mental health institution	Case report	1 visit	1

5	Case study and presentation	Case/Viva	1	1
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## EVALUATION

### Internal Assessment (50%) = 50

- Clinical performance = 10
- Case presentation = 10
- MSE = 10
- Process recording = 5
- Report of observation visit = 5
- Health education = 5
- Nursing care plan = 5

### Final examination (50%): 50

- OSPE = 30
- Viva Voce = 20

## **B.SC NURSING FOURTH YEAR COURSES**

BSN31	Leadership & Management (T)
BSN32	Leadership & Management (P)
BSN33	Health Economics in Nursing (T)
BSN34	Educational Science (T)
BSN35	Educational Science (P)
BSN36	Research and Biostatistics (T)
BSN37	Research (P)
BSN38	Elective Subject (T)
BSN39	Elective Subject (P)



## OVERVIEW OF FOURTH YEAR B.SC NURSING COURSE

Code No	Name of the Courses	Total Hours	Marks
BSN31	Leadership & Management (T)	100	100
BSN32	Leadership & Management (P)	378 (9 wks.)	100
BSN33	Health Economics in Nursing (T)	50	50
BSN34	Educational Science (T)	60	100
BSN35	Educational Science (P)	252(6wks)	100
BSN36	Research and Biostatistics (T)	100	100
BSN37	Research (P)	252(6wks)	100
BSN38	Elective Subject (T)	100	100
BSN39	Elective Subject (P)	378 (9wks)	100
	<b>Total</b>	<b>Th= 410hrs</b> <b>Pr = 1260</b> <b>Total 1670 hrs</b>	<b>850</b>

## Mode of Assessment

Subject	Mode of Assessment						
	Theory			Practical			Grand total marks
	Internal Assessment	Final Assessment	Total Marks	Internal Assessment	Final Assessment	Total Marks	
Leadership & Management	30	70	100	50	50	100	200
Health Economics	15	35	50	-	-	-	50
Educational Science	30	70	100	50	50	100	200
Research & Biostatistics	30	70	100	50	50	100	200
Elective Subjects	30	70	100	50	50	100	200

## **LEADERSHIP AND MANAGEMENT (Theory)**

<b>Course Number: BSN 31</b>	<b>Placement: 4<sup>th</sup> year</b>
<b>Total Hour: 100</b>	<b>Total mark: 100</b>

### **Course Description**

This course introduces the students to theories, principles, process and function of management as they relate to leadership in nursing in hospital/community and institutional settings. It includes knowledge of policy making, national health human resource planning and managing nursing services including emergency preparedness and management and educational programmes at all level.

### **Course Objectives**

**At the completion of the course the student will be able to:**

1. Discuss the principles and function of management.
2. Describe the different roles of the nurse manager.
3. Explain the different leadership styles used in management including its benefits and the limitations.
4. Explain the management process in the hospital communities and different health facilities.
5. Describe the organizational structure, function and policies of HMG health services and own institute.
6. Describe organizational communication in management.
7. Explain the National health policy and health care delivery system in Nepal.
8. Describe the job description of health personnel of various categories.
9. Discuss human resource management.
10. Discuss the management of disaster situation in hospital and in the community settings.

### **Course content**

#### **Unit 1: Introduction of leadership and management**

**10 hours**

- Terms used in leadership and management: Leadership, leader, Management, Manager, Administration, Administrator, Organization
- Theories of management
- Principles of management
- Functions of management

## Unit 2: Planning

10 hours

- Definition and purposes
- Benefits and limitations
- Elements of planning and process
- Reasons for failure of the plans
- Objectives /Strategy
  - Definition, Characteristics, Importance
- **Procedure**
  - Definition, Benefits and limitations, Nursing procedure manuals
- Differentiate between
  - Objectives and policy
  - Policy and procedure
- **Policy**
  - Definition and types, Benefits, Characteristics, Formulation, Nursing policies
- Policy, rules and regulations of Nepal Government and its Legal implications
  - Employment process
  - Criteria for selection
  - Salary scale
  - Promotion, career development
  - Educational opportunities
  - Rotation and movement of staff
  - Leave
  - Monitoring and evaluation of performance
  - Termination of employment
  - Accreditation and registration

## Unit 3: Organization

12 hours

- Definition, Types: formal and informal, Purposes, Principles , Elements
- **Structuring organizational relationship**
  - Organizational behaviour communication (review)
  - Role of communication in organization
  - Improving Organizational Communication
- **Group dynamics**
  - Definition, Characteristics of group, group formation, Advantages of group
- **Organizational conflict**
  - Definition and effect
  - Types: functional and non-functional
  - Manager's role in conflict management
- **Authority, power, responsibility and accountability**

### **Authority**

- Definition, Sources, Types

### **Power**

- Definition, Types,
- Responsibility: Definition and their usefulness,
- Accountability: Definition and their usefulness

### **Delegation**

- Definition and types, Process, Principles, Benefits and limitations, Reasons for under delegation

- **Organizational structure of health care delivery system of Nepal**

- Federal health system
- Provincial health system
- Local health system
  - Primary Health Care Centre
  - Health Post

- **Organizational Structure of own University and Institute of medicine**

- Structure
- Faculty Board: Relationship with health services.
- Campus: relationship with hospital and health Post

- **Organizational Change**

- Definition: Organizational Change and change agent
- Need for change
- Sources for change
- Resistance to change
- Types of behaviour which effect change
  - Assertive Behaviour
  - Non-assertive behaviour
  - Aggressive Behaviour
- Change process

## **Unit 4: Leading and Directing**

**10 hours**

- Definition of leadership
- Comparison of Leadership and Management
- Functions of Leadership

### **Leadership theories:** Trait theory, Behaviour theory, Situational Theory

- Personal Characteristics and function of Leader
- Nursing leadership in PHC

- Nurses role in PHC
- Role of nurses to take change

### **Leadership role in nursing**

- Nursing curricula
- Nursing activities
- Professional organization
  - Nepal Nursing Council
  - Nursing Association of Nepal
  - International Confederation of Midwife
  - International Council of Nurses

### **Supervision**

- Definition, Purposes, principles and Process, Supervisory role of the manager

## **Unit 5: Controlling**

**10 hours**

- Definitions and Types
- Need for controlling
- Basic steps of controlling process
  - Setting Standard/Objective
  - Making comparison
  - Taking correcting action
- Job analysis, Job description, job specification, Job rating.
- **Quality control**
  - Introduction
  - Process
  - Approaches of quality control
    - Quality Assurance
    - Nursing Audit
    - Credentialing
    - Accreditation
    - Licensures
    - Certification
- Budgetary control

## **Unit 6: Personnel Management**

**14 hours**

- Concept of National health policy
- Health care delivery system in Nepal
- Status of human resources: Present and prediction for future

### **Human resource planning**

- Definition, Importance, Elements, principles
- Steps of Human resource planning

### **Human Resource Development (HRD)**

- Definition, Factors affecting HRD
- **Motivation**
  - Definition, Types, Motivating factors, Theories of Motivation
  - Managerial role promoting personal motivation
- **Job Satisfaction**
  - Definition, Purposes, Contributing Factors, State factors affecting morale and its effect
- **Morale**
  - Definition, Factors affecting Morale, Effects of Morale. Relationship of motivation to Job satisfaction and morale.
- **Discipline of the personnel**
  - Definition, Types, Objectives, Principles, Guideline for disciplinary action

### **Unit 7: Professional Development**

**10 hours**

- Definition of profession and its criteria
- Strengths and short comings in nursing profession
- Influence of power and politics in professional development
- Responsibility for personal and professional growth
- Professional correspondence
  - Letter of application
  - Letter of acceptance
  - Letter of resignation

### **Unit 8: Management Resources**

**10 hour**

- Definition, Principles  
(Money, Time, Space, Equipment, Drugs, Paper)
- Health Management Information System (HMIS)
- Nursing informatics
- Record and reporting

### **Unit 9: Managing during emergency situation**

**8 hours**

#### Disaster Management

- Disaster and its types
- Triage, Function of triage

- Handling mass casualty
- Disaster management team
- Hospital as well as community Preparedness for Emergencies and Disaster
- Nurses responsibility during emergency situation

### **Unit 10: Campus management**

**6 hours**

- Organizational Structure or organogram of own campus
- Administrative activities (General, Personnel development, Finance)
- Academic activities (Curriculum development/ revision, Academic activities, Students' Examinations)

**Teaching/ Learning Strategies:** Self-directed learning, interactive lecture, group discussion, individual assignment, group work, presentation.

### **Evaluation Methods**

#### **Internal Assessment: 30**

Group presentation -10 marks

Written examination -20 marks

#### **Final examination: 70; Written**

### **Text Books**

1. Singh, I. (2014). Leading and Managing in Health. Kathmandu Nepal: J. B Singh Publisher
2. Vati, J. (2013). Principles and Practices of Nursing Management and Administration for BSC & M. Sc Nursing. New Delhi: Jaypee Publication.

### **References**

1. Agrawal, GR. (2069 BS). Foundation of Human Resource Management in Nepal. KTM Nepal: MK publisher.
2. Basanthappa, BT. (2009). Nursing Administration. New Delhi: Jaypee Publication.  
Chatterje, S.S. (1976). An Introduction to Management. Calcutta: The World Press Pvt.
3. Gillies, DA. (1994). Nursing management: "A system approach" – (Third ed.), W.B.Saunders Company Ltd.
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5. Rebecca, A. & Patronis, J. (2009). Nursing leadership and management Theories process and Practices. New Delhi. Jaypee Publication.
6. Samson, R.(2009). Leadership and Management in nursing practice and Education. Delhi: Jaypee Publication.
7. Thapa, P (2013). Leadership & Management for Nurses: New Delhi. Jaypee Publication.
8. Tripathi, PC & Ready PN. (2001). Principle of management second edition. New Delhi: Tata Mc Graw

## **LEADERSHIP & MANAGEMENT (Practical)**

<b>Course No: BSN 33</b>	<b>Placement: 4<sup>th</sup> year</b>
<b>Hours: 378</b>	<b>Marks: 100</b>

### **Course Description**

This course offers the student opportunity to implement the concepts and principles of management in the hospital and community units. Out of the total 9 weeks of management practicum, student will spend 6 weeks in ward management, 2 weeks in community management and 1 week in campus administration observation and report writing.

### **Course Objectives**

At the end of the course the student will be able to:

#### **Ward management**

1. Act as in-charge in different wards taking full responsibilities.
2. Co-operate with different categories of staff and departments.
3. Assign duty for the staff and students.
4. Supervise the junior students and auxiliary workers under her management in the ward.
5. Maintain daily/weekly supplies according to needs of the unit.
6. Identify the administration problems in the unit and try to solve them in an effective manner with co-operation of ward sister/staff.

#### **Community management**

1. Identify the structure and functions of district level or provincial level health office.
2. Prepare work schedules for daily activities.
3. Supervise the work of the auxiliary health workers in the primary healthcare centre.
4. Identify the administrative problems at district and health faculty level and give possible suggestions.
5. Identify resources, both personnel and material, in the health faculty and mobilize these resources to solve problems or to improve the situations.
6. Plan and give in-service teaching to health facility.

## **Clinical Experience**

### **Ward management 6 weeks**

1. Planning routine work in ward/unit
2. Taking in-charge ship in one shift
3. Taking night report, handover of equipment and supplies, including drugs
4. Delegation of responsibilities to staff and students
5. Prepared duty list
6. Prepared assignment to staff
7. Maintaining cleanliness of ward/unit
8. Maintaining good interpersonal communication with staff and patients
9. Writing daily reports as needed
10. Maintains supplies and equipment
11. Giving planed health teaching and planning

### **Community management: 2 weeks and 1 week campus management observation and report writing.**

1. Prepared assignment to staff and students
2. Identify activities of the organization
3. Preparing organogram
4. Identifying administrative problems and solutions:
  - Staff problem
  - Supply and equipment problem
  - Communication problems
  - Delegation responsibilities
5. Participation in mobile clinics activities
6. Planed in-service education
7. Prepared report.

## **Evaluation**

Internal Assessment (50%): 50 marks

- **Ward management: 30**
  - In-service education-1 = 10
  - Change process1. = 5
  - Clinical performance - 10
  - Development of nursing care planned -5
- **Community Management: 20**
  - Clinical performance- 10
  - In-service education- 5
  - Change process- 2.5
  - Report of the administration and academic responsibilities of the campus chief and observation visit-2.5

Final examination (50%): Viva 50

## **HEALTH ECONOMICS (Theory)**

<b>Course no: BSN 34</b>	<b>Placement: 4<sup>th</sup> year</b>
<b>Hour: 50</b>	<b>Marks: 50</b>

### **Course Description**

This course introduces the students to basic concepts of economics and development as they relate to health and health care. This course also includes the various factors which affects the economy and development of country and how these intern influences the type of health care services and training of human resources for health in the country. This knowledge will facilitate nurses in performing their management role more effectively.

### **Course objectives**

At the end of the course the students will be able to:

1. Explain the relationship of economics and development in planning and implementing health care in Nepal.
2. Explain how the principles of economics affect the production of human resources for health.
3. Identify the problems affecting delivery of health services and training of human resources for health in Nepal.
4. Describe the techniques of economic evaluation.
5. Discuss issues of health care financing
6. Identify problems in the national economy which affect the quantity and quality of health services.
7. Describe the health related changes which affect the economy of the country.
8. Discuss the possible solutions to the problems which are affecting the delivery of health services and training of human resources for health in Nepal.

### **Contents**

#### **Unit 1: Concepts of Economy and Development**

**6 hours**

- Definition of term
  - Economics
  - Health : As public good, private goods, consumption good, investment goods)
  - Health Economics
  - Utility
  - Consumption

- Health and Development-Characteristics of developing economics and industrialized economics

Poverty and Health and development-stages of development

**Unit 2: Approaches to Economics** **2 hours**

- Micro- economics
- Macro-economics
- Principles of Economics
  - Scarcity
  - Choice

**Unit 3: Health Care Market** **6 hours**

- Concept of Market
- Consumer( Patient) of health care
- Producer( Hospital/ Health personnel) of health care
- Law of demand and supply
- Demand for Health care
  - Demand and utilization of health care
  - Determinants of demand for health care
  - Intensity of demand for health care and choice of provider
  - Elasticity of demand.
- Supply of health care
  - Determinants of supply of health care
  - Hospital care
  - Non hospital care
  - Public provider
  - Private provider
  - Elasticity of supply

**Unit 4: Production of Health Care and cost** **4 hours**

- Health care cost
- Factors affecting production of health care (Health system, capital equipment, Human resources for health)
- Input- output relationships, change in inputs (single inputs and all inputs) and results in output.
- Value of input (costs), fixed costs and variable costs, average costs, marginal costs, long run costs)
- Difference between direct and indirect costs

**Unit 5: Health care financing** **5 hours**

- Health care financing
- Function of health care financing
  - Risk pooling
  - Purchasing of health care
- Sources of financing
- Methods of payment
- Health insurance

**Unit 6: Economic Evaluation**

**4 hours**

- Meaning, types and process of economic evaluation

**Unit 7: National Income**

**8 hours**

- Definition of income
- Sources of income
  - Performance of personal services
  - Impersonal services
- Factors determining national income
  - Quality and quantity of factors of production
  - State of technical knowledge
  - Political instability
- Determinants of national income
  - Differentiate between Gross national product(GNP) and Net national product(NNP)
  - Importance of National income
  - Uses of National income data

**Unit 8: Problems in Nepalese economics affecting health**

**6 hours**

- Socio-cultural Factors
  - Social system
  - Value system
  - Change in life style
- Political influences in Health care
- Education
- Food and material production
- Transportation
- Health services of country
  - Characteristics of health services in developing countries
  - Equity and efficiency
- Population trends
  - Malthus and optimum theory of population

- Migration and its effect on health
- Migration and its impact in environment
- Migration and its effect on economy
- Natural disaster: Famines, droughts, floods, landslides, earthquakes.
- Changes in ecology created by man

**Unit 9: Changing Health status and their effect on economy of Nepal** **4 hours**

- Birth Rate
- Morbidity and mortality rate
- Modern health care facilities
- Population control programs
- Primary Health care

**Unit 10: Distribution of National Income** **5 hours**

- Sources of income
  - National
  - Foreign Aid for health
- National Budget for health and education
- Financial limitation of the government and its effect on delivery of health care
- Solution proposed in current national health plan

**Teaching/Learning Methods and Activities**

- Interactive teaching
- Brain storming
- Self-directed learn
- Individual and group assignments and presentations

**Evaluation**

**Internal Assessment: 15**

- Written test 10
- Presentation (group/individual) - 5

**Final Examination: 35 marks; Written Examination**

**Text Book**

1. Ananda, N.K, Goal S. (2010). Health Economic 2nd ed. AITS Publication India

2. Mills, A, & Gilson L. (1988). Health Economics for Developing Countries: A Survival Kit. EPC Publications

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1. Allender, J.D., and Spradley, W.S., Community Health Nursing: promoting and protecting the Public's Health. (2005). Lipincott Williams Wilkins.
2. Ahuja, H. L. (2010): Advanced Economic Theory, S. Chand & Co., New Delhi
3. Dwivedi (2008), Microeconomics: Theory and Applications (2nd ed), Dorling K
4. Dewett, K.K. and Verma, J.D., Elementary economic theory, New Delhi: S. Chand & Company Ltd.
5. Hanson, J.L.(1983). A textbook of economics,London: MacDonald and Evans Ltd. And the ELBS.
6. Mories s. (1998) Health Economic for Nurses an introductory Guide. Prentice Hall Nursing Series. Prentice Hall PTR
7. Rambur B., (2015). Health care financing, Economics and policies for Nurses: A fundamental Guide. Reteived from September 5th 2016. Retrieved [https://books.google.com.np/books?id=PcUJCAAAQBAJ&printsec=frontcover&dq=Health+Economic+for+nurses+2016&hl=en&sa=X&redir\\_esc=y#v=onepage&q&f=false](https://books.google.com.np/books?id=PcUJCAAAQBAJ&printsec=frontcover&dq=Health+Economic+for+nurses+2016&hl=en&sa=X&redir_esc=y#v=onepage&q&f=false)
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## EDUCATIONAL SCIENCE (Theory)

<b>Course No: BSN 35</b>	<b>Placement: 4<sup>th</sup> Year</b>
<b>Hours: 60</b>	<b>Marks: 100</b>

### Course Description

This course is designed to provide knowledge of the basic concepts, principles and methods of teaching and learning as well as in planning the teaching session by applying the principles of learning theories.

### Course Objectives

1. Explain the concept of education, philosophy, aims and objectives.
2. Discuss the principles and approaches of teaching and learning.
3. Explain the behavioral objectives used in different domains.
4. Discuss lesson plan and micro-teaching
5. Identify the various methods and media used in teaching/learning process.
6. Explain the evaluation process and the tools to be used in evaluating student
7. Describe the concepts and approaches to clinical teaching and supervision.

### Course contents

#### Unit 1: Introduction to Education

**5 hours**

- Definition
- Aims/Objective
- Importance
- Functions
- Philosophy of nursing education (Naturalism, Idealism, Realism and Pragmatism)
- Trend of nursing education in Nepal

#### Unit 2: Introduction to Teaching and Learning

**10 hours**

##### Teaching

- Definition, Purposes, Principles, Approaches to teaching, Roles of teacher
- Characteristics/qualities of an effective teacher
- Teaching ethics

##### Learning

- Definition, Purposes, Characteristics of learning
- Principles of learning and adult learning
- Learning process /Elements of learning:

- Goal
- Stimulus
- Perception
- Response
- Consequence
- Integration
- Learning approaches:
  - Surface approach
  - Deep approach
- Factors affecting learning: Facilitating and hindering for learning

### **Unit 3: Teaching / Learning Environment**

**4 hours**

- Concept, Types:
  - Physical environment
  - Psychosocial environment

### **Unit 4: Educational Objective**

**5 hours**

- Terms related to educational objectives:
  - Goals
  - Mission
  - Objective/aims
- Types of objectives
- Criteria elements/components for writing behavioral objectives
- Qualities/ characteristics of behavioral objectives:
- Classification /categories of behavioral objectives according to Blooms taxonomy  
Cognitive Domain, Psychomotor Domain, Affective Domain
- Benefits of behavioral objectives

### **Unit 5: Lesson Plan**

**5 hours**

- Introduction of lesson plan
- Definition, Purposes, Needs for lesson plan
- Determinants of planning lesson: learner's level and level of understanding, availability of time and students size
- Components of lesson plan
- Advantage and limitations of lesson plan

### **Unit 6: Micro-Teaching**

**4 hours**

- Introduction, Purpose, Characteristics,

- Microteaching cycle /Process
- Principles of microteaching
- Benefits and limitations of microteaching

## **Unit7: Teaching / Instructional Methods and Resources**

**10 hours**

- **Teaching/ Instructional Methods**
  - Definition, Criteria for selecting various teaching methods
  - Various teaching methods including their definition, purposes, principles, process, advantages and disadvantages :
- **Individual Methods**
  - Counseling
  - Interview
  - Coaching
  - Individualized tutorial
- **Group Methods**
  - Group discussion
  - Small group discussion (buzz)
  - Demonstration
  - Seminar
  - Symposium
  - Workshops
  - Role Play
- **Mass Methods**
  - Lecture
  - Exhibition
  - Conference
- **Other Methods**
  - Self-directed learning
  - Evidenced based learning
  - Problem based learning
  - Distance (e-learning)
  - Tele Medicine/ nursing
- **Teaching learning Resources/ Audio-visual aids/medias**
  - Definition,
  - Criteria for selecting of learning resources or A-V aids
  - Principles of preparation and use of learning resources or A-V aids
  - Characteristics of learning resources or A-V aids
  - Types of learning resources:
    - Audio aids**

- Tape recorders
- Radio

**Visual Aids**

- **Projected visual medias:**
  - Overhead projector and Transparency
  - LCD, Power point
- **Non Projected visual medias:**

Display Boards

  - Chalk boards/white boards
  - Poster
  - Charts
  - Flip Chart
  - Flash cards
  - Photograph
  - Model
  - Real Object
  - News print
- **Audio-visual aids**
  - Television
  - Video
  - Film /Motion picture

**Unit 8: Evaluation**

**8 hours**

- Definition, Purposes, Principles
- Types of evaluation:

**Based on the use of result:**

- Placement evaluation
- Formative evaluation
- Diagnostic evaluation
- Summative evaluation

**Based on interpretation of result**

- Criterion verses norm
- Referenced evaluation
- Evaluation tools/measures

Characteristics of evaluation tools: Validity, Reliability, Objectivity, Practicability

**Methods and test items use in evaluation of nursing education:**

- Classroom test/Knowledge(Paper and pencil test)

**Types:** Subjective test Objective test

**Construction of test:** general principles, specification table

- Clinical evaluation/Skills
  - Observation technique:
  - Types: rating scale, check list, anecdotal record
  - Written assignment
  - Viva voce
  - Objective Structure Clinical examination (OSCE),
  - Objective Structural practical examination (OSPE)
- Attitude evaluation
  - Check list
  - Rating scale/Likert scale

### **Unit 9: Clinical Teaching and Supervision**

**6 hours**

- Definition,
- Purposes
- Principles
- Factors influencing clinical teaching
  
- **Methods of clinical teaching :**
  - Bedside clinic
  - Nursing rounds
  - Nursing shift reports
  - Nursing care conference
  - Incidental teaching
  
- **Skill teaching**
  - Definition
  - Area of skill learning: cognitive, psychomotor and communication skill
  - Process/steps of skill teaching /learning
  
- **Clinical Supervision**
  - Meaning, purpose, principles, methods, supervisory skills, challenges and tools used in supervision

### **Unit 10: In-service Education**

**3 hours**

- Meaning and definition
- Purposes
- Need assessment
- Planning in-service education and conduction of training

## Assessment

- Internal assessment (formative assessment): The provision of internal assessment (formative assessment) is made for theory. The weight- age of formative assessment will be 30% of total marks (100). Formative assessment must be completed at the end of the posting in each subspecialty.

## Evaluation

- Internal examination(30%): 30marks
- Final examination(70%): 70 marks

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1. Basavanthappa B. T. (2009). Nursing Education (2<sup>nd</sup> edition). New Delhi: Jaypee Brothers.
2. Bloom B. (1956). Taxonomy of Education Handbook 1: Cognitive Domain, New York:
3. George M. (2008).Teaching and Learning in the school of nursing (1<sup>st</sup> edition).AITBS. Publisher, India.
4. Guilbert J. J. (2000). Educational Handbook for Health Personnel, Geneva: World Health Organization.
5. Heidgerken L. E. (2008). Teaching and Learning in Schools of Nursing (3<sup>rd</sup> edition). New Delhi: Himalayan Books, (1st Indian Ed.).
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11. Uprety K. (2020).Teaching methods and resources in the school of nursing, first edition. Akshav publication: Kathmandu.

## EDUCATIONAL SCIENCE (Practical)

<b>Course No: BSN 36</b>	<b>Placement: 4<sup>th</sup> year</b>
<b>Hours: 252</b>	<b>Marks: 100</b>

### Course Description

This practical course offers the students an opportunity to develop knowledge, skills and attitude in teaching by using the principles of teaching/learning process in classroom and clinical setting.

### Course Objectives:

At the end of this clinical course, students will be able to:

1. Develop lesson plan with clearly stated objectives, contents teaching-learning activities, time and evaluation
2. Demonstrate effective teaching performance in classroom as well as in clinical setting.
3. Use various audio visual aids appropriate to the topic.
4. Develop master plan and rotation plan of a respective year
5. Prepare evaluation tools to assess student learning in classroom and clinical settings.
6. Implement the principles of T/L while supervising the students in clinical areas.

### Clinical Practicum

Student's teachers are assigned to nursing campuses for 252 hours (6 weeks) in order to develop skills and attitude in teaching and learning. During this period the following activities need to be performed under the supervision of the teacher.

Total practicum days:

- 5 days/weeks for 6 weeks-classroom and clinical teaching and supervision
- 1 day/week for 6 weeks- self-study and preparation

### Teaching Learning Activities

- Supervision of junior students
- Preparation and implementation of teaching plan in classroom and clinical setting
- Construction and implementation of evaluation tools in classroom and clinical setting
- Preparation and use of various A-V aids during practicum
- Preparation of master and rotation plan
- Micro-teaching and practice

## **Evaluation: 50marks**

Evaluation of educational science practicum will be carried out internally only.

Internal marks 50

### Activities

- |  |    |
|--|----|
| 1. Classroom teaching plans -2   | 10 |
| 2. Classroom teaching performance -2   | 10 |
| 3. Clinical/ field teaching plans + performance -1                                   | 5  |
| 4. Classroom test construction -1  | 5  |
| 5. Preparation and implementation of one evaluation tools for clinical setting -1 -5 |    |
| 6. Master plan   | 5  |
| 7. Supervision of daily clinical performance of students                             | 10 |

Final examination :50

- Microteaching
- Viva



## **RESEARCH AND BIOSTATISTICS (Theory)**

<b>Course No: BSN 37</b>	<b>Placement: 4<sup>th</sup> year</b>
<b>Hours: 100</b>	<b>Marks: 100</b>

### **Course Description:**

This course provides knowledge regarding the basic concepts of research and bio-statistics for carrying out nursing research studies.

### **Course Objectives:**

At the end of the course the student will be able to:

1. Describe the historical development of research in nursing.
2. Explain the purpose of research.
3. Explain the significance of research in nursing.
4. State the ethical aspects to be considered in nursing research.
5. Explain the different types of research in nursing.
6. Explain the steps of research process.
7. Analyze the given data using univariate and bivariate techniques.
8. Explain the principles and components of a research proposal
9. Describe the research report in terms of principles, purpose, types, contents and guideline.

### **Contents**

#### **Unit 1: Introduction of research 10 hrs**

- Meaning and purpose of research
- Basic terminologies used in research: Facts, concepts, theory, conceptual framework, variables, operational definition, assumptions, limitations, research validity
- Historical development of research in nursing
- Significance of research in nursing: Accountability, professionalism, social relevance, nursing education, nursing administration,
- Ethical considerations in nursing research:
- Implications of unethical research
- Ethical considerations: Anonymity, confidentiality, privacy, informed consent, administrative approval and risk-benefit balancing
- Computer application and its role in research

**Unit 2: Types of Research****6 hrs.**

- In terms of the purpose of research: Basic, applied and action research
- In terms of the time factor: Historical, descriptive and experimental
- In terms of the nature of data: Qualitative and quantitative

**Unit 3: Biostatistics in Research****25 hrs.**

- Purpose and limitations of statistical analysis
- Basic terms used in statistics
- Levels of Measurement: Nominal, ordinal, interval and ratio scales

**Statically analysis:**

- Use of computer in data analysis
- Descriptive statistics: Use of tables and graphs; frequency distribution: presentation of data in tabular and graphic form; Measures of central tendency; Measures of skewness and measures of dispersion (variability) including range and standard deviation, correlation analysis, and two-by- two contingency table analysis
- Statistical interpretation and hypothesis testing

**Unit 4: Research Process:****40 hrs**

- Meaning and steps of research process
- Research problem
- Meaning, sources and characteristics

**Formulation of research problem**

- Hypothesis:
- Meaning, sources, characteristics, significance and types of hypothesis
- Formulation of hypothesis

**Literature review:**

- Definition, purpose, scope (types of information and depth and breadth of coverage)
- Primary and secondary sources
- Process of literature review
- Organization of the reviewed literature (content and style)
- Citation and bibliographic entries of the reviewed literature using APA, Vancouver style

### **Research design:**

- Meaning and purpose of research design
- Factors influencing selection of research design and elements of good design.
- Types of research design:
  - a) Non-experimental (historical, case study, descriptive, comparative, correlation, cross-sectional and longitudinal) and
  - b) Experimental (true-experimental, quasi-experimental and pre-experimental designs) and to research studies
- Threats to research designs and measures of controlling variable

### **Sampling:**

- Meaning, purpose and process of sampling
- Sampling techniques including their merits and demerits:
  - a) Probability sampling techniques
  - b) Non-probability sampling techniques (convenient, purposive, quota and snow-ball sampling),
- Sample size estimation and factors affecting sample size
- Data collection methods and instruments:

Direct observational method and instruments: checklist, rating scale including their merits and demerits

Indirect method: Interview method including structured, semi-structured and in-depth interview, questionnaire method, document review guide and measuring devices including their merits and demerits
- Instrumentation: Process, types of questions, bias,
- Establishment of validity and reliability of the instrument
- Data analysis and interpretation
- Data processing: Editing, coding and classification of data, problems in data processing,
- Data analysis: Types of analysis: univariate and bivariate analysis and correlation analysis
- Data interpretation: Meaning and techniques,
- Discussion, conclusion and recommendations

### **Unit 5: Research Proposal**

**10 hrs.**

- Meaning and purpose of research proposal

- Principles of research proposal
- Components of research proposal:
- Background
- Research problem
- Rationale (direct and indirect beneficiaries)
- Objectives and hypotheses
- Operational definitions of terms and variables
- Review of related literature
- Research methodology: Design, study setting, target population, sampling technique and size, instrumentation, plan for data collection (including ethical considerations) and data analysis
- References
- Work plan
- Budget

#### **Unit 6: Research Report**

**8 hrs.**

- Purpose and types of research reports:
- Steps in writing research report (APA style)
- Contents of research report
- Introduction
- Methods section
- Result section
- Discussion section
- Other contents of the report

#### **Teaching/ Learning Activities**

Interactive lecture, group discussion, individual assignment, group work, presentation

#### **Evaluation Methods**

##### **Internal Assessment: 30**

Proposal writing in group-10 marks

Written examination -20 marks

##### **Final examination: 70; Written**

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## **RESEARCH & BIOSTATISTICS (Practical)**

<b>Course No: BSN 38</b>	<b>Placement: 4<sup>th</sup> year</b>
<b>Hours: 252</b>	<b>Marks: 100</b>

### **Course Description:**

This course provides students the skills in developing research proposals, carrying out research studies in sub group and reporting the result of the research study.

### **Course Objectives:**

At the end of the course, the student will be able to:

1. Develop research proposal
2. Conduct research study as planned
3. Analyze and interpret data
4. Prepare the research report in a systematic way

### **Clinical Objective/ Competencies**

At the end of the practicum, students will be able to:

- Develop research proposal on the approved nursing problem
- Defend the proposal before the research committee for approval
- Prepare instrument for the research study and finalize for data collection
- Seek administrative permission for collecting data
- Collect data considering ethical aspects of the subjects
- Transform the collected data into data sheet for analysis
- Analyze the data using appropriate statistical methods
- Prepare the research report using the guideline provided
- Defend the research report

**Teaching/ Learning Activities:** Individual and group work, consultation and presentation for feedback

1. Research title selection and presentation in small group
2. Prepare research proposal and presentation in group
3. Tool development and presentation in group
4. Research report present

5. Research report submission

**Internal Assessment: 50**

**Areas of assessment**

- Presentation of research proposal- 5 marks
- Written research proposal- 10 marks
- Research report- 35 marks

**Final examination: 50**

- Report presentation
- Viva (defense)

**ELECTIVE SUBJECT (THEORY)**  
**OPERATION THEATRE MANAGEMENT (THEORY)**

<b>Course No: BSN 39</b>	<b>Placement: 4<sup>th</sup> year</b>
<b>Hours: 100</b>	<b>Marks: 100</b>

**1. Course Description:**

This course will facilitate students to gain knowledge regarding management of operation theatre.

**2. Course Objectives**

On completion of this course, student will be able to:

- Review the history of surgery
-



Purpose of team approach  
Different types of positioning and positioning devices  
Concerns related to different positions

- Material management in operation theatre  
Process of material management

Data management in operation theatre  
Management of surgical specimens

## **Unit 2: Organization of the Personnel and Environment**

**10 hrs**

- Operation theatre team
  - The sterile team
  - The unsterile team
- Role and responsibilities of operation theatre team, personnel and job description
  - Surgical Patient
  - Surgeon
  - Anesthesiologist
  - Operation theatre supervisor and manager
  - Anesthesia assistant
  - Scrub nurse
  - Circulating nurse
  - Operation theatre technician
  - Supporting staffs
- Health hygiene of OT Personnel
- Care of the surgical patient
  - Pre-operative nursing care
  - Peri-operative nursing care
  - Post-operative nursing care (Immediate and late)
- Standard nursing care plan
- Surgical site infection, its preventive and treatment strategies for a surgical patient

## **Unit 3: Infection Prevention in Operation Theatre**

**30 hrs**

- Terminology
- Infection, sources of contamination in operation theatre
- General principles of infection prevention
- Standard precautions
  - Hand washing (simple and surgical hand scrub techniques)
  - Use of surgical attire and personal protective equipment (PPE) caps, masks, gowns, gloves, eye wear (gowning gloving techniques)
  - Safe disposal of sharps
  - Safe injection practices
  - Disinfection of personal equipment
- Environmental sanitation of operation theatre
  - Before first case of the day
  - During room turnover between patients
  - Daily terminal cleaning
  - Weekly, monthly cleaning

- Instruments care and cleaning  
Common antiseptics used in operation theatre  
Decontamination  
Level of disinfection  
Instrument cleaning and lubrication
- Sterilization: standards and practice  
Different methods of sterilization used in the operation theatre  
Preparing instruments for steam sterilization
- Traffic control
- Waste disposal management  
Types of waste generated  
Segregation and disposal of infected and non-infected waste  
Proper disposal of waste materials

**Unit 4: Principle of Anesthesia**

**8 hrs**

- Introduction to anesthesia
- Different types of anesthesia and their management (General anesthesia, regional anesthesia, local anesthesia and intravenous anesthesia)
- Preoperative assessment
- Intra-operative fluid management
- Endotracheal intubation, indications, preparation and extubation
- Post-operative complications, its prevention and management

**Unit 5: Preparation and Draping of the Surgical Site**

**10 hrs**

- Aseptic technique; purposes/definitions  
Principles and practices of aseptic technique
- Skin Preparation and the scrub preparation
- Drapes and draping

D

- xPerioperative documentation
- xGuidelines
- xOperation theatre record of operation
- Preoperative checklist
- Perioperative surgical counts
- Post anesthesia recovery (PAR) notes

Unit 7: Safety Precautions in Operation Theatre 5 hrs

- xHazard and safety; definition, types, prevention and management
- Surgical counts; instruments, sharps and sponges
- Electrosurgical safety
- Pneumatic tourniquet safety
- Laser safety
- Radiation safety

Unit 8: Medical Emergencies in Operation Theatre 4 hrs

- xDefinition, types, prevention and management during medical emergencies
- Airway emergencies
- Cardiovascular emergencies
- Allergic Reactions
- Other emergencies, e.g. Shock, Accidental Injuries, fall injury, burns
- xDisaster preparedness in operation theatre

#### 4. Teaching/Learning Methods/Resources

- xLecture/discussion
- xSkill lab demonstration/~~re~~demonstration
- xGroup work and presentation
- xCase studies

#### 5. Evaluation

Internal examination 30

- xWritten exam
- xProject work (protocol development)
- xGroup/individual presentation

Final exam 70

- xWritten exam

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**ELECTIVE SUBJECT**  
**OPERATION THEATRE MANAGEMENT (PRACTICAL)**

<b>Course No: BSN 39</b>	<b>Placement: 4<sup>th</sup> year</b>
<b>Hours: 378</b>	<b>Marks: 100</b>

**Course Description**

This course provides opportunity to the students to develop skills by utilizing their knowledge into practice from the theory course namely operation theatre nursing management.

**Course objectives**

Demonstrate proper management of operation theatre

Carry out the role of scrub nurse and circulating nurse for at least 5 major and 10 minor cases.

Demonstrate appropriate setup of equipment for different types of surgery.

Provide preoperative, intra-operative and immediate postoperative nursing care to the surgical client with the standard nursing care plan.

Practice standard precautions and other infection control measures while caring the surgical client.

Identify the anesthetic drugs, equipment and machines. Prepare and assist the anesthesiologist during the anesthesia procedure.

Demonstrate the knowledge and skills of sterilization for different types of instruments and equipment used in operation theatre.

**3. Clinical Experience**

Students will perform their clinical practicum to the various units of operation theatre (major OT, minor OT, CSSD and recovery room) under the supervision and guidance of a clinical supervisor for a total period of 5 weeks (210 hours).

**4. Clinical Activities**

- Management of operation theatre.
- Carry out role and responsibilities of scrub and circulating nurse for at least 5 major and 10 minor cases.
- Set-up the instrument trolley and drapes for different surgical procedures and assist

accordingly.

- Provide nursing care to the surgical clients before, during and after surgery.
- Assist in preparation and procedure of the anesthesia.
- Perform various activities of surgical instrument care such as decontamination, cleaning, disinfection and sterilization.
- Perform one case study and case presentation.
- Visit site of waste disposal system.

## **5. Evaluation**

- Internal Assessment:50  
Daily clinical performance  
Case study and presentation
- final Examination:50  
OSCE/OSPE  
Viva voce

**ELECTIVE SUBJECT (THEORY)**  
**CHILD HEALTH NURSING (THEORY)**

<b>Course No: BSN 39</b>	<b>Placement: 4<sup>th</sup> year</b>
<b>Hours: 100</b>	<b>Marks: 100</b>

**Course Description**

This course deals with the care of children from birth to adolescence as unique individuals with special needs. Emphasis is given on the promotion of growth and development of the children and prevention and management of childhood illnesses. Students acquire knowledge, advanced skills and attitudes relevant to their professional roles in dealing with the health challenges of children in the hospital and community health care settings.

**Course Objectives**

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

- Define the terms and modern concepts in pediatric nursing (review)
- Explain the Historical over view of child care practices
- Explain the role of pediatric nurse in the care of children
- Discuss the process of growth and development of children from birth to adolescence
- Describe the measures to be taken for the promotion of the optimum growth and development of children from infancy to adolescence.
- Explain the etiology, pathophysiology, sign and symptoms, diagnostic investigation, treatment and nursing management of various neonatal problems.
- Explain the etiology, pathophysiology, sign and symptoms, diagnostic investigation treatment and nursing management of various medical and surgical conditions in children.
- Discuss the national policy and strategies related to child health nursing.
- Describe the common childhood emergency including their preventive and first aid management.
- Describe the common nutritional deficiency disorders and their management.
- Explain the stress of illness and hospitalization and its coping mechanism among sick children and their family.
- Explain the role of paediatric nurse in reducing and managing stressful and crisis situation in children.

**Course Overview**

**Unit 1: Introduction to Paediatric Nursing**

**6 hrs.**

- Terms used in paediatric nursing (review)
- Modern concept of child and paediatric nursing
- The difference between child and adult

- Historical development of child care practices
- Child health status in SAARC countries
- Health Indicators related to Child Health
- Child rights
- Role of pediatric nurse in the care of children, Evidence based nursing practice
- National policy and programme related to child health

#### Sustainable Developmental Goals

Concepts of child-to-child programme,

Integrated management of childhood illness (IMCI) programme

Saving newborn lives (SNL)

Baby friendly hospital initiative

Expanded programme of immunization (EPI)

Kangaroo mother care (KMC)

Skilled birth attendance (SBA)

National Neonatal Health Strategy

### **Unit 2: Growth & Development of Children**

**12hrs.**

- Concept of growth and development
- Factors influencing growth and development
- Growth and developmental miles stone and developmental tasks of different stages of children (Infancy to adolescence)
- Promotion of optimum growth and development of children in different age group
  - Nutrition
  - Protection from infection
  - Cleanliness
  - Prevention of accidents
  - Plays and toys
  - Rest and sleep, Exercise
  - Dental care
  - Anticipatory guidance, Impact of Videogames and Television
- Behavior problems (Enuresis, ADHD, Delinquency, Thumb sucking, Temper Tantrum, Breath Holding Spell, Nail Biting, Drug abuse, School phobia, Learning disability, Sleep Disorders, Hyperactive child, Obesity in adolescent, suicide )
- Autistic Spectrum Disorder

### **Unit 3: Assessment of Children**

**4 hrs.**

- History taking
- Physical examination including growth and development and nutritional assessment (new born and child assessment)
- Pediatric investigations and nurses role

### **Unit 4: Stress and coping mechanism in children**

**6hrs.**

- Separation anxiety
- Stress of illness and hospitalization in children



- Chronically and terminally-ill children and its management
- Children with life-threatening illnesses
- Parental coping with impending death of children and nurses' role

### **Unit 5: Pediatric Procedures**

**8 hrs.**

- Admission and discharge
- Oxygen administration and other inhalation therapy
- Administration of medicines including dosage calculation
- Restraining and positioning
- Collecting specimens
- Cup feeding, tube feeding
- IV fluid administration
- Care of the infant in incubator/ventilator
- Colostomy care
- Tracheotomy care
- Wound dressing (review)
- Assisting in intrusive procedures (Lumber puncture, Bone marrow aspiration, Biopsy)
- Radian Warmer
- Phototherapy
- Exchange blood transfusion
- Oral rehydration solution preparation (ORS)
- Baby bath
- New born resuscitation
- Paediatric resuscitation

### **Unit 6: Care of Newborn**

**5 hrs**

- Newborn's adjustment to extra uterine life: Physiological changes in the new born
- Assessment of newborn
- Characteristics of healthy newborn
- Mother- newborn bonding
- Nursing care of neonate: Immediate care at birth, care during the first 24 hrs and subsequent care
- Danger signs of Newborn

### **Unit 7: Common Neonatal Problems and their management**

**5 hrs**

- Thrush
- Neonatal Jaundice
- Hypothermia
- Neonatal Sepsis
- Respiratory distress syndrome (RDS)
- Birth asphyxia
- Hypoglycemia
- Danger sign/ high risk neonate
- LBW care

- Sudden infant death syndrome
- Dehydration
- Nursing management of children in fluid imbalance

**Unit 8: Common Respiratory Disorders and Nursing Management** **6hrs.**

- Respiratory infections: pharyngitis, tonsillitis, bronchitis, broncho-pneumonia, Bronchial asthma, emphysema /empyema, Pulmonary Tuberculosis, Congenital disease: cystic fibrosis, Tracheal esophageal fistula

**Unit 9: Common Cardio-vascular and Blood Disorders and Nursing Management** **6hrs.**

- Acquired: Rheumatic heart diseases/ rheumatic fever
- Congenital heart diseases
- Hematological: Thalasaemia, Anemia, hemophilia, Leukemia, non- hodgkin's disease, Immune thrombocytopenic purpura

**Unit 10: Common Gastro-intestinal Disorders and Nursing Management** **6hrs.**

- Diarrhea, dysentery, worm infestations, dental carries
- Intestinal obstruction
- Malabsorption syndrome
- Hernia
- Hepatitis
- Congenital defects: Hare lip and cleft palate, esophageal Artesia, pyloric stenosis, Hirschsprung's disease, imperforated anus

**Unit 11: Common Genito-Urinary Disorders and Nursing Management** **6hrs.**

- Urinary tract infection, Glumurulonephritis, nephrotic syndrome, acute and chronic renal failure, and urinary bladder stones
- Hypospadias, epispadias, undescended testes, phymosis, inguinal hernia, Wilm's tumor

**Unit 12: Common Neurological Disorders and Nursing Management** **6 hrs.**

- Congenital malformation: hydrocephalus, spina bifida, meningocele, meningomyelocele,
- Bacterial/viral meningitis, encephalitis
- Head injury
- New growth
  - Brain tumors
  - Neuroblastoma
  - Retinoblastoma
- Seizure disorder, Epilepsy, febrile convulsions
- Mental retardation, Down's syndrome,

**Unit 12: Common Endocrine Disorders and Nursing Management** **4hrs.**

- Dwarfism, gigantism, juvenile diabetes, Diabetes insipidus, Addison's disease, Cushing's syndrome, precocious puberty

- Toxicity of thyroid gland: hypothyroidism (Cretinism)

**Unit 13: Common Musculo-Skeletal Disorders and Nursing Management 4hrs.**

- Cerebral palsy
- Congenital defects: Club foot, Scoliosis, Lordosis, Kyphosis, hip dysplasia, Muscular dystrophy
- GB syndrome
- Osteosarcoma

**Unit 14: Eye, ENT, Skin Disorders and Nursing Management 6hrs.**

- Congenital cataract
- Conjunctivitis, Blepharitis,
- Squint, vision defects
- Sinusitis
- Otitis media, hearing defect
- Tonsillitis (review)
- Speech problems
- Scabies, impetigo, boils, burn
- Epistaxis
- Aphthous Ulcer

**Unit 15: Common Communicable Diseases (Review) 4hrs.**

- Tetanus, syphilis, diphtheria, chicken pox, typhoid, malaria, kala-azar, HIV/AIDS, hepatitis, diarrhea, measles

**Unit 16: Common Pediatric Emergency and Management (Review) 4hrs.**

- Falls, burns, poisoning, drowning
- Foreign body in nose ear & throat and choking
- Insect bites, bleeding etc
- Road traffic accident
- Physical assaults

**Unit 17: Nutritional Deficiency Diseases and Nursing Management (review). 2hrs**

- Night blindness, xerophthalmia
- Rickets
- Scurvy
- Malnutrition

**Teaching/ Learning Methods**

Classroom lecture and discussion  
 Problem based learning (PBL)  
 Role-play  
 Demonstrations

## **Evaluation**

Internal assessment (30%)

- Written test
- Individual/group presentation
- Project work/Home assignment

Final examination

- Written examination(70%)

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**ELECTIVE SUBJECT (PRACTICAL)**  
**CHILD HEALTH NURSING (PRACTICAL)**

<b>Course No: BSN 39</b>	<b>Placement: 4<sup>th</sup> year</b>
<b>Hours: 378</b>	<b>Marks: 100</b>

**Course description:**

This course provides opportunity to student to identify growth and development pattern of children at different age group. It also offers students the opportunity to develop advanced skills and positive attitude in the care of sick and well newborns and children. This course also provides opportunity in developing in- depth understanding about the various disease conditions of children.

**Course Objectives**

At the end of course the student will be able to:

- Assess the growth and development and health status of sick and well children of different age group.
- Provide holistic nursing care to the children according to their needs.
- Take measures to promote coping with stress of illness and hospitalization.
- Apply the concept of integrated management of childhood illnesses (IMCI) in assessing children with different health challenges.
- Perform pediatric procedure competently by using appropriate technique.
- Utilize the nursing process in providing nursing care to children with different health problems in different settings.
- Communicate effectively with children in different age group.
- Assist parents/ care givers in meeting the physical and psychological needs of the children.
- Utilize recent technology and various equipment used for child care.
- Give health education to parents/care givers for illness prevention and health promotion of children

**Clinical Experience**

Clinical experience will include a total of 210 hrs (5 Wks ) in Pediatric nursing. Students will apply knowledge, skills in developing positive attitudes and competency in the holistic care of children and families. This will include using the nursing process to assess, plan, implement and

S.N.	Areas of Practice	Duration	Type of performance
1.	Paediatric ward	4weeks	Daily clinical performance Health teaching Care plan

History taking and Physical examination, newborn assessment

- Case study/ presentation

- Log Book

3. Pediatric OPD            2 Week

4. NICU/PICU                            3 Week

Total 9 weeks

Evaluate care to children with medical/ surgical health problems. Health promotion and illness prevention measures will be utilized in pediatric nursing care from infancy to adolescence.

### **Evaluation**

#### **Internal evaluation 50**

- Daily clinical performance
- Health teaching
- Care plan
- History taking and Physical examination, newborn assessment
- Case study/ presentation

#### **Final Examination 50**

- Practical examination
- Viva