

**CURRICULUM**  
**Proficiency Certificate Level**  
**in**  
**Nursing**  
(Three year program - Yearly System)



Council for Technical Education and Vocational Training  
**Curriculum Development Division**

Sanothimi, Bhaktapur

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## **Introduction**

The Council for Technical Education and Vocational Training (CTEVT) started Proficiency certificate level (PCL) in nursing programme in 1999 AD (2056 BS). However, to provide vertical and horizontal access to PCL nursing graduates, with kind permission of Tribhuvan University (TU), Institute of Medicine (IOM), CTEVT started using the TU, IOM curriculum for PCL nursing. With the changing health needs as well as Nepal government's health policy, CTEVT took action to respond to these needs; as result CTEVT has developed a curriculum for PCL nursing in 2013. PCL nursing is one of the prominent and popular disciplines within the Nursing profession. The nursing profession has been helping the world for the all-round development of health and it has also been creating salary base employment and self employment opportunities in public and private sectors. This curriculum is designed with the purpose of producing middle level technical nursing workforce equipped with knowledge and skills related to the field of nursing so as to meet the demand of such workforce in the country to contribute in the national economic development of Nepal. The knowledge and skills incorporated in this curriculum will be helpful to deliver the individual needs as well as national needs in the field of Nursing Profession.

Nepal Government has adopted a national policy for the attainment of "Health for All beyond the Year 2000 A.D" through the use of the primary health care approach. As a result CTEVT got the mandate to produce middle level trained workforce through CTEVT as well as CTEVT affiliated institutions.

During the process of curriculum development the Nepal Government has endorsed the concept of gerontology care, because the PCL nursing graduates are prominent service providers; the Department of Health has suggested incorporating this new emerging health issues in the curriculum. Likewise the psychiatric nursing theory and clinical hours has increased, similarly a new subject called Basic Science Applied to Nursing has been added that consists of Biochemistry (Microbiology, Parasitology & Virology) and Pharmacology. Some portions of oncology nursing is also has been added in the curriculum. The course is conducted both in theoretical and practical sessions.

This course is based on the job performance requirement of the Staff Nurse at different levels of health care system of Nepal. Therefore, this curriculum is designed to develop knowledge, skills, and attitude among graduates to perform nursing professional practice. In total three years; the first year course is focused on basic nursing care in hospital and in the community: foundational nursing practices; the second year course is focused on preventive, promotive as well as therapeutic nursing care of sick adult and elderly individual as well as mentally ill individual. Similarly, the third year course comprise of the pediatric, midwifery and gynecology as well as leadership and management.

## **Curriculum title**

Proficiency Certificate Level in Nursing (PCL Nursing)

## **Aims**

The program aims to produce a middle level nursing work force who is independent and competent to assume the responsibility to carry out the function of preventive, primitive, curative, rehabilitative and holistic care of an individual/group at hospital and in community settings.

## **Program Objectives**

Upon completion of the program the graduate will be able to:

- Utilize a sound knowledge base in giving care to well and sick individuals, families and communities.
- Implement preventive and therapeutic measures directed toward promotion, maintenance and restoration of health.
- Utilize communication skills effectively while communicating with individuals and groups in a variety of settings.
- Apply the nursing process in providing and improving health care.
- Assume leadership role for planning and improving health care.
- Guide and supervise individuals, families and groups including health care workers.
- Collaborate with multi-sectorial groups to develop a healthful environment, including safe drinking water, environmental sanitation and other comprehensive approaches in the community.
- Mobilize the community people to participate in the activities of the village health post.
- Demonstrate a positive attitude and respect for cultural values and health practices in working to meet needs and solve problems.
- Continue to seek new knowledge for personal and professional growth.
- Seek new knowledge and skill continuously for personal and professional growth.

## **Group Size**

- The group size will be maximum of 40 (forty) students in a batch.

## **Entry Criteria**

- School Leaving Certificate (SLC) in 2<sup>nd</sup> division (45%) with English, Science, and Mathematics or SEE with minimum GPA 2.0 and C grade in Compulsory Mathematics, English & Science.
- SLC passed plus TSLC in Auxiliary Nurse Midwife (ANM) with minimum 68.33%.
- Should pass entrance examination as administered by CTEVT.
- Applicants fulfilling the entry criteria will be selected for admission on merit basis.

## **Duration:**

The total duration of this curricular program is three academic years. The program is based on yearly system. Moreover, one academic year consists up to 40 weeks and one academic week consists up to 40 hours excluding evaluation period.

## **Medium of Instruction:**

The medium of instruction will be in English and/or Nepali.

## **Pattern of Attendance:**

Minimum of 90% attendance in each subject is required to appear in the respective final examination.

## **Teacher and Student Ratio:**

- For theory: 1:40
- For demonstration: 1:10
- Clinical: 1:6-8 (Hospital)
- Field Practice: 1:10-12 (Community)

## **Qualification of Teachers and Demonstrators:**

- The program coordinator should be a master's degree holder in the related field.
- The disciplinary subjects' related teachers should be a bachelor's degree holder in the related areas with three years experience in the related field.
- The demonstrators should be bachelor's degree holder in the related area with two years experiences in training activities.

## **Instructional Media and Materials:**

The following instructional media and materials are suggested for the effective instruction and demonstration.

- **Printed Media Materials** (Assignment sheets, Case studies, Case presentation, Handouts, Information sheets, Individual training packets, Procedure sheets, Performance Check lists, Textbooks etc.).
- **Non-projected Media Materials** (Display, Models, Flip chart, Poster, Writing board etc.).
- **Projected Media Materials** (Opaque projections, Multimedia, Overhead transparencies, Slides etc.).
- **Audio-Visual Materials** (Audiotapes, Films, Slide-tape programs, Videodiscs, Videotapes etc.).
- **Computer-Based Instructional Materials** (Computer-based training, Interactive video etc.).

## **Teaching Learning Methodologies:**

The methods of teachings for this curricular program will be a combination of several approaches. Such as Illustrated Lecture, Tutorial, Group Discussion, Demonstration, Simulation, Guided practice, Independent practice, Practical experiences, Fieldwork, Report writing, Term paper presentation, Case analysis, Tutoring, Role-playing, Heuristic, Project work and Other Independent learning.

- Theory: Lecture, Discussion, individual/group Assignment, Interaction, Seminar, Group work.
- Practical: Demonstration, Guided practice and self practice in skill lab, Clinical practice, Observation visit, Guided practice, Project work, institutional clinical practices (mental health, geriatric home, school health, hospice care etc.)

## **Mode of Education:**

There will be inductive and deductive mode of education

## **Examination and Marking Scheme:**

### **a. Internal assessment**

- There will be a transparent/fair evaluation system for each subject both in theory and practical exposure.
- Each subject will have internal assessment at regular intervals and students will get the feedback about it.
- Weightage of theory and practical marks are mentioned in course structure.

- Continuous assessment format will be developed and applied by the evaluators for evaluating student's performance in the subjects related to the practical experience.

**b. Final examination**

- Weightage of theory and practical marks are mentioned in course structure.
- Students must pass in all subjects both in theory and practical for certification. If a student becomes unable to succeed in any subject, s/he will appear in the re-examination administered by CTEVT.
- Students will be allowed to appear in the final examination only after completing the internal assessment requirements.

**c. Requirement for final practical examination**

- Professional of relevant subject instructor must evaluate final practical examinations.
- One evaluator in one setting can evaluate not more than 20 students.
- Practical examination should be administered in actual situation on relevant subject with the provision of at least one internal evaluator from the concerned or affiliating institute led by external evaluator nominated by CTEVT.
- Provision of re-examination will be as per CTEVT policy.

**d. Final practicum evaluation will be based on:**

- Institutional practicum attendance - 10%
- Logbook/Practicum book maintenance - 10%
- Spot performance (assigned task/practicum performance/identification/arrangement preparation/measurement) - 40%
- Viva voce :
  - Internal examiner - 20%
  - External examiner - 20%

**e. Pass marks:**

- The students must secure minimum 40% marks in theory and 50% marks in practical. Moreover, the students must secure minimum pass marks in the internal assessment and in the semester final examination of each subject to pass the subject.

## **Provision of Back Paper**

There will be the provision of back paper but a student must pass all the subjects of all year within six years from the enrollment date; however there should be provision of chance exam for final year students as per CTEVT rules.

## **Disciplinary and Ethical Requirements**

- Intoxication, insubordination or rudeness to peers or any seriously breakage of the institutional rules will result in immediate suspension followed by the review of the disciplinary review committee of the institute with possible expulsion.
- Dishonesty in academic or practical activities will result in immediate suspension followed by administrative review, with possible expulsion.
- Illicit drug use, bearing arms in institute, threats or assaults to peers, faculty or staff will result in immediate suspension, followed by administrative review with possible expulsion.

## **Grading System**

The following grading system will be adopted:

- Distinction: 80% and above
- First division: 65% to below 80%
- Second division: 50 % to below 65%
- Pass division: Pass marks to Below 50%

## **Certification:**

- Students who have passed all the components of all subjects of all three years are considered to have successfully completed the course.
- Students who have successfully completed the course will be awarded with a will be awarded with a degree of "**Proficiency Certificate Level in nursing**".

## **Career Path:**

- The graduates will be eligible for the position equivalent to Non-gazetted 1st class (technical) as Staff Nurse or as prescribed by the Public Service Commission of Nepal. The graduate will be eligible for registration/take examination with the related Council in the grade as provisioned in the related Council Act (if any).
- The graduates are eligible to go for Bachelor of Nursing or equivalent Course as per university rule.

## **Curriculum Code and Credits:**

In this curriculum each subject has its code; full marks; and credit hours divided into lecture hours, tutorial hours, and practical hours.

## **Provision of Specialization:**

There will be no provision of specialization.

## Question Patterns for Written Exam

The question patterns for written exam are suggested as follows;

### A. For subject with full marks 80

S. N.	Type of question	No of question	Weightage marks	Full marks	Time distribution	Optional questions
1	Long	3	8	24	54 min	1
2	Short	8	4	32	72 min	2
3	Very short	12	2	24	54 min	2
	<b>Total</b>	<b>23</b>		<b>80</b>	<b>180 min</b>	

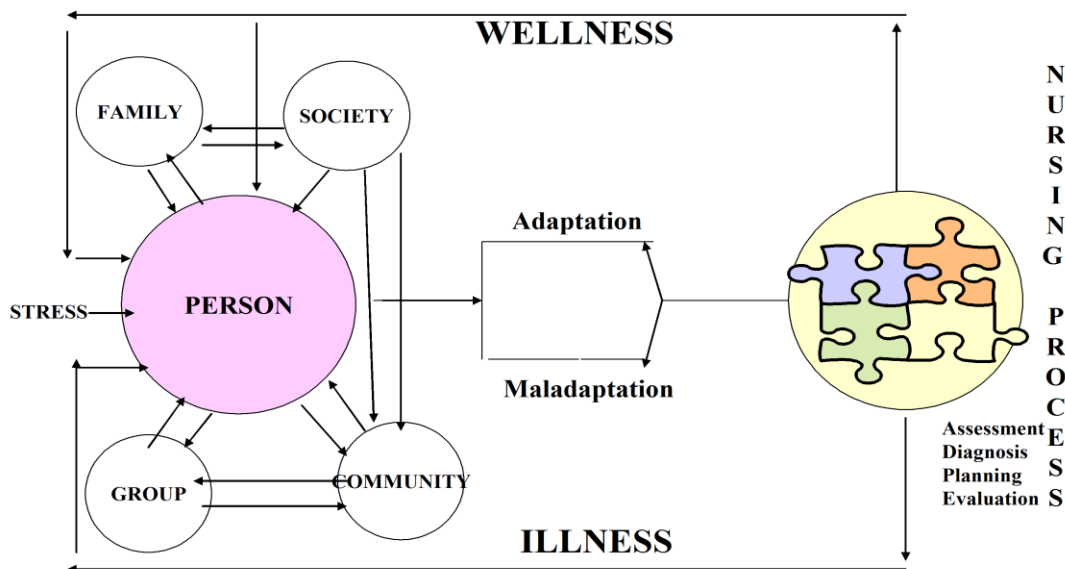
### B. For subject with full marks 60

S. N.	Type of question	No of question	Weightage marks	Full marks	Time distribution	Optional questions
1	Long	3	6	18	54 min	1
2	Short	8	3	24	72 min	2
3	Very short	9	2	18	54 min	2
	<b>Total</b>	<b>20</b>		<b>60</b>		

### C. For subject with full marks 40

	Type of question	No of question	Weightage marks	Full marks	Time distribution	Optional questions
1	Long	2	6	12	27	1
2	Short	4	4	16	36	1
3	Very short	6	2	12	27	1
	<b>Total</b>	<b>12</b>		<b>40</b>	<b>90</b>	

# Conceptual Framework of the Program



## DEFINITIONS

**PERSON** – in this Model, a Person is identified as a Behavioral System involving actions and behaviors responding to Stress from the internal and external environment as it attempts to maintain or restore equilibrium within the system. As a Behavioral System, a Person is made up of interrelated subsystems which influence how the person reacts to the environment. These actions are regulated or controlled by biological, psychological and sociological factors.

**ENVIRONMENT**- is made up of internal factors in the physical and psychological makeup of the person which attempts to maintain and restore balance within the system as the person reacts to external factors such as family, community and social influences.

**HEALTH**- the dynamic state of the human life and development which involves continuous adjustment to stressors in the internal and external environment through optimum use of one’s resources to achieve the maximum potential for living and internal equilibrium.

**NURSING** –is a Bio-Psycho-Social science which focuses on the person/family/community attempting to restore or maintain balance and adapt to stress in the environment. The nurse practitioner is involved in an interpersonal relationship which utilizes the Nursing Process in order to meet the person’s basic needs and achieve and maintain a stable state of equilibrium.

**STRESS** –any demand made on the individual which causes imbalance within the system. This may be due to problems in development, breakdown of internal control mechanisms, exposure to harmful influences or accidents, inadequate stimulation or lack of environmental input.

## Course Structure of PCL Nursing

### First Year

S. N.	Course Number	Name of Subjects	Theory Hours	Practical Hours
1	501	Fundamental of Nursing (T)	160	
2	502	Fundamental of Nursing (P)		630
3	503	Community Health Nursing I (T)	120	
4	504	Community Health Nursing I (P)		210
5	505	Anatomy and Physiology	100	
6	506	Basic Science Applied to Nursing Pharmacology Biochemistry Microbiology	100 (40) (30) (30)	
7	507	English	120	
8	521	Nepali	120	
		<b>Total</b>	<b>720</b>	<b>840</b>

### Second Year

S. N.	Course Number	Name of Subjects	Theory Hours	Practical Hours
1	508	Medical and Surgical I (T)	150	
2	509	Medical and Surgical I (P)		446
3	510	Medical and Surgical II (T)	50	
4	511	Medical and Surgical II (P)		175
5	514	Geriatric Nursing (T)	50	
6	515	Geriatric Nursing (P)		70
7	519	Mental health and behaviors nursing (T) Behavior health Mental health	100 (50) (50)	
8	520	Mental health and behaviors nursing (P)		70
9	516	Community Health Nursing II (T)	100	
10	517	Community Health Nursing II (P)		240
11	518	Social science	50	
		<b>Total</b>	<b>500</b>	<b>1001</b>

### Third Year

S. N.	Course Number	Name of Subjects	Theory Hours	Practical Hours
1	524	Midwifery Nursing I (T)	100	
2	525	Midwifery Nursing I (P)		150
	526	Midwifery Nursing II (T)	100	
4	527	Midwifery Nursing II (P)		170
5	528	Midwifery Nursing III (T)	100	
6	529	Midwifery Nursing III (P)		150
7	530	Gynecology Nursing (T)	50	
8	531	Gynecology Nursing (P)		70
9	512	Child health nursing (T)	100	
10	513	Child health nursing (P)		140
11	522	Leadership and Management (T)	100	
12	523	Leadership and Management (P)		342
		<b>Total</b>	<b>550</b>	<b>1022</b>

## Evaluation Scheme

S. N.	Subject	Theory Course					Practical Course				Exam Hours	Total Hours	Total Mark
		Total Hours	Total Mark	Marks Distribution		Exam Hours	Total Hours	Total Mark	Marks Distribution				
				Internal Exam	Final Exam				Internal	Final			
	<b><u>First Year</u></b>												
1	Fundamental of Nursing	160	100	20	80	3	630	300	150	150	6	790	400
2	Community Health Nursing I	120	100	20	80	3	210	100	50	50	3	330	200
3	Anatomy and Physiology	100	100	20	80	3						100	100
4	Basic Science Applied to Nursing	100	100	20	80	3						100	100
5	English	120	100	20	80	3						120	100
6	Nepali	120	100	20	80	3						120	100
	<b>First Year Total</b>	<b>720</b>	<b>600</b>	<b>120</b>	<b>480</b>		<b>840</b>	<b>200</b>	<b>100</b>	<b>100</b>		<b>1560</b>	<b>1000</b>
	<b><u>Second Year</u></b>												
1	Medical and Surgical Nursing I	150	100	20	80	3	446	200	100	100	4	596	300
2	Medical and Surgical Nursing II	50	50	10	40	1.5	175	100	50	50	3	225	150
3	Geriatric Nursing	50	50	10	40	1.5	70	50	25	25	2	120	100
4	Community Health Nursing II	100	100	20	80	3	240	150	75	75	4	340	250
5	Behaviors science and Mental Health Nursing	100	100	20	80	3	70	50	25	25	2	170	150
6	Social science	50	50	10	40	1.5	0	0	0	0		50	50
	<b>2nd Year Total</b>	<b>500</b>	<b>450</b>	<b>90</b>	<b>360</b>		<b>1001</b>		<b>275</b>	<b>275</b>		<b>1501</b>	<b>1000</b>
	<b><u>Third Year</u></b>												
1	Midwifery I	100	100	20	80	3	150	100	50	50	3	250	200
2	Midwifery II	100	100	20	80	3	170	100	50	50	3	270	200
3	Midwifery III	100	100	20	80	3	150	100	50	50	3	250	200
4	Gynecology nursing	50	50	10	40	1.5	70	50	25	25	2	120	100
5	Child health nursing	100	100	20	80	3	140	100	50	50	3	240	200
6	Leadership and Management	100	100	20	80	3	342	100	50	50	4	442	200
	<b>Third Year Total</b>	<b>550</b>	<b>550</b>	<b>110</b>	<b>440</b>		<b>1022</b>	<b>550</b>	<b>275</b>	<b>275</b>		<b>1572</b>	<b>1100</b>

# First Year

## Master Plan for first year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Study Block												Fundamental Nursing Clinical										Vacation					

29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Fundamental of Nursing/ Community Health Nursing Field								Vacation	Study Block				Fundamental of Nursing/ Community Health Nursing Field						Revision Class	Final Exam			

S. N.	Subject	Weeks	Shift	Hours	Weeks Distribution
1.	Fundamental of Nursing	18	Morning (12 weeks x 5 days x 7 hrs) Evening (6 weeks x 5 days x 7 hrs)	420  210	Study Block= 16 weeks Clinical Field=24 (18+6) weeks Vacation=8 weeks Revision=1 weeks Final exam=3 weeks
2.	Community Health Nursing	6	6 weeks x 5 days x 7 hrs	210	

# Fundamental of Nursing (Theory)

**Theory: 160 hours**

## **Course Description:**

This course is designed to introduce the student's on basic nursing concepts, skills and attitudes. It also included the professional history within and outside the country, its scope and on the physiological, Psychological and Social need of safety, comfort and therapeutic measures for individual family and community.

## **Course Objectives:**

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

- Define nurse and nursing.
- Describe the history of nursing in the World and Nepal.
- Discuss roles and responsibilities of a nurse, ethical values and legal aspects for protecting the patients from harm and professionals from legal action.
- State patients and professional right.
- Explain the national and international nursing professional regulatory bodies and associations.
- Describe different types of hospitals in Nepal.
- Explain basic human needs.
- Explain nursing process and its components.
- Explain infection control measures to prevent the hospital acquired infection
- Demonstrate the basic nursing procedures used in care of patients.
- Explain the process of helping patient to meet their various needs.
- Identify comfort measures and devices based on the need/condition of the patients.
- Explain the pre and post-operative nursing care of the patient.
- Explain different types and principles of dressing and bandaging
- Explain different kinds of information and recording system in clinical setting.
- Describe importance and method of communication and its uses with patients,/family and the health team.
- Describe pain and pain management.
- Identify technique of drug administration.
- Identify different First Aid measures for different condition arises as emergency.
- Explain care of death and dying patient.

## **Course Contents**

### **Unit 1: Introduction to Nursing**

**8 hrs**

#### 1.1 Nurse and Nursing 2hrs

- Definition of nurse and nursing.
- Qualities of a good nurse.
- Roles and responsibilities of nurse in hospital and out of hospital
- History of nursing: International/National

#### 1.2 Ethical and legal aspect in nursing

2 hrs

- Ethics and Ethical principles
- Code of ethics: ICN/NNC

<ul style="list-style-type: none"> <li>• Major ethical issues in nursing practice</li> <li>• Ethical and Legal responsibilities of the nurse</li> </ul>	
1.3 Professional organizations in nursing: NNC, NAN, ICN	2 hrs
1.4 Consumers and Professional protection:	2 hrs
<ul style="list-style-type: none"> <li>• Patient's right and Nurse's right</li> </ul>	
<b>Unit 2. Introduction to Hospital Nursing</b>	<b>10 hrs</b>
2.1 Hospital	2 hrs
<ul style="list-style-type: none"> <li>• Definition.</li> <li>• Purposes</li> <li>• Types and functions</li> </ul>	
2.2 Admission and Discharge of the patient	6 hrs
<ul style="list-style-type: none"> <li>• Admission procedure: <ul style="list-style-type: none"> <li>-Receiving the patient</li> <li>- Assessment and immediate care of patient</li> <li>- Orientation to patient and family</li> <li>- Documentation</li> </ul> </li> <li>• Discharge procedure <ul style="list-style-type: none"> <li>- Discharge preparation</li> <li>- Discharge teaching</li> <li>- Documentation</li> </ul> </li> <li>• Transfer of patient <ul style="list-style-type: none"> <li>- Unit to unit</li> <li>- Hospital to hospital</li> <li>- Hospital to home</li> </ul> </li> </ul>	
2.3 Documentation	2 hrs
<ul style="list-style-type: none"> <li>• Definition: Recording and reporting</li> <li>• Purpose, techniques and principles of recording and reporting (with example)</li> </ul>	
<b>Unit 3: Basic Need of Individual</b>	<b>8 hrs</b>
3.1 Basic Human Needs: Definition and types	2 hrs
3.2 Florance Nightingale's needs	2 hrs
3.3 Henderson's need: 14 components	2 hrs
3.4 Maslow's hierarchy of needs	2 hrs
<ul style="list-style-type: none"> <li>• Physiological needs</li> <li>• Safety and security needs</li> <li>• Love and belongings needs</li> <li>• Self - esteem needs</li> <li>• Self-actualization needs</li> </ul>	
<b>Unit 4: Nursing Process</b>	<b>16 hrs</b>
4.1 Nursing process: Definition, Purpose and importance	2 hrs
Skills for nursing care	
<ul style="list-style-type: none"> <li>• Cognitive skills</li> <li>• Technical skills</li> <li>• Interpersonal skills</li> </ul>	

4.2 Component of nursing process	8 hrs
4.2.1 Assessment	
• Data collection: Types, Source, Method of data collection (History taking, physical examination, review reports)	
• Data organization	
• Data validation	
• Data Documentation	
4.2.2 Nursing Diagnosis:	
• Definition, Types	
• Formulating Nursing Diagnostic Statements according to(NANDA)	
• Difference between nursing diagnosis and medical diagnosis	
4.2.3 Planning	
• Setting priorities	
• Writing nursing goals	
4.2.4 Implementation	
• Assessing or reassessing the patient	
• Determining the nurses need for assistance	
• Implementing nursing intervention	
• Supervising the delegated care	
• Documenting nursing activities.	
➤ Skills for nursing care	
○ Cognitive skills	
○ Technical skills	
○ Interpersonal skills	
○ Legal skills	
4.2.5 Evaluation:	
• Evaluation of goal achievement	
• Reassessment of care plan	
4.3 Documentation of nursing care: Nursing care plan	2 hrs
4.4 Communication:	4 hrs
4.4.1 Definition, types and barriers	
4.4.2 Importance of interpersonal relationship	
• Patients	
• Family members	
• Health personnel	

**Unit 5: Infection Control Measures** **15 hrs**

5.1 Basic Concept of Infection Prevention	5 hrs
• Terminologies used in infection preventions	
• Chain of infection;	
✓ Sources of infectious agents	
✓ Susceptible hosts	
✓ Mode of transmission	
➤ Contact transmission (Direct/indirect contact transmission)	
➤ Droplet transmission	
➤ Airborne transmission	
• Healthcare-associated infection	

5.2 Prevention of HAI	10 hrs
5.2.1 Standard Precautions	
<ul style="list-style-type: none"> <li>• Perform Hand hygiene</li> <li>• Use of PPE (gloves, gown, mask, eye protection, or face shield)</li> <li>• Needle stick and Sharp Injury Prevention</li> <li>• Cleaning, Disinfection, and Sterilization of patient care equipment and instruments/devices including Cleaning and Disinfection of Environment</li> <li>• Waste Disposal</li> <li>• Textiles and laundry</li> <li>• Patient placement</li> <li>• Respiratory Hygiene/Cough Etiquette</li> <li>• Safe injection practices</li> <li>• Infection Control practice for Special Lumber Puncture Procedures; wear a surgical mask during procedures</li> </ul>	
5.2.2 Transmission-Based Precautions	
<ul style="list-style-type: none"> <li>• Contact precautions</li> <li>• Droplet precautions</li> <li>• Airborne precautions</li> </ul>	
<b>Unit 6: Nursing Measures to Assess the Patient</b>	<b>18 hrs</b>
6.1 Vital signs: Definition and Purposes	1 hrs
6.2 Temperature	4 hrs
<ul style="list-style-type: none"> <li>• Regulation of body temperature</li> <li>• Factors affecting body temperature</li> <li>• Principles and Method of measuring and recording body temperature: Oral, , Axillary and Rectal</li> <li>• Conversion of temperature from centigrade into Fahrenheit and vice versa.</li> <li>• Alteration in body temperature: different types of fever, Pulse- hypothermia.</li> <li>• Care of client with hypothermia and hyperthermia</li> <li>• Definition and type of pulse</li> <li>• Characteristics of normal pulse</li> <li>• Factor affecting pulse rate</li> <li>• Sites of taking pulse</li> <li>• Principle and method of taking pulse</li> </ul>	
6.3 Respiration	4 hrs
<ul style="list-style-type: none"> <li>• Definition and Types of respiration</li> <li>• Characteristics of normal respiration</li> <li>• Factors affecting respiration</li> <li>• Method of checking respiration</li> </ul>	
6.4 Blood Pressure	4 hrs
<ul style="list-style-type: none"> <li>• Definition and Types</li> <li>• Factors affecting Blood pressure</li> <li>• Characteristics of Blood pressure</li> <li>• Sites and technique of measuring BP</li> <li>• Relationship between blood pressure and Pascal's law</li> </ul>	
<b>Recording vital signs in graphical chart</b>	
6.5 Measuring Height/ Weight	2 hrs

6.6 Nurses responsibilities in laboratory/ radiology diagnosis	3 hrs
<ul style="list-style-type: none"> <li>• Collection, labeling and dispatch of specimen- Urine, Stool, Blood, Sputum, Pus and Throat Swab <ul style="list-style-type: none"> <li>▪ X-ray examinations</li> <li>▪ Ultrasonography (USG)</li> <li>▪ Magnetic resonance imagine (MRI)</li> <li>▪ Computerized tomography scanning (CT Scanning)</li> <li>▪ Endoscopy</li> </ul> </li> </ul>	
<b>Unit 7: Nursing Measures related to Physical Needs of the Patient</b>	<b>10 hrs</b>
7.1 Personal Hygiene: Definition, Purpose Principles and Procedure of:	5 hrs
<ul style="list-style-type: none"> <li>• Oral care: Conscious and Unconscious patient</li> <li>• Skin care: partial and complete bath, Sponge bath, Bathroom bath, Bed bath</li> <li>• Hair care: Hair combing, hair wash and drying</li> <li>• Eye care</li> <li>• Back care</li> <li>• Nail care, foot care</li> </ul>	
7.2 Pressure sore (in immobility)	5 hrs
<ul style="list-style-type: none"> <li>• Definition</li> <li>• Causes</li> <li>• Stages of pressure sore</li> <li>• Major sites for pressure sore</li> <li>• Preventive measure and care of pressure sore</li> </ul>	
<b>Unit 8: Nursing Measures related to Comfort of the patient</b>	<b>10 hrs</b>
8.1 Rest sleep and exercise	1 hrs
8.2 Bed and Bed Making	3 hrs
<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Purposes and Principles</li> <li>• Types of bed making <ul style="list-style-type: none"> <li>• Unoccupied Bed</li> <li>• Occupied Bed</li> <li>• Orthopedic Bed</li> <li>• Cardiac Bed</li> <li>• Post -operative</li> <li>• Burns Bed</li> <li>• Air and water bed</li> <li>• Divided Bed <b>not common</b></li> <li>• Striker Bed</li> </ul> </li> </ul>	
8.3 Positioning the patient: Different positions and their uses	3 hrs
<ul style="list-style-type: none"> <li>• Supine position</li> <li>• Lateral position</li> <li>• Prone position</li> <li>• Dorsal recumbent</li> <li>• Fowlers / semi- fowlers</li> <li>• Lithotomy position</li> </ul>	

<ul style="list-style-type: none"> <li>• Knee chest position</li> <li>• Sims position</li> <li>• Trendelenburg</li> <li>• Kneeling</li> </ul>	3 hrs
8.4 Comfort devices: Different devices used for patient in hospital:	3 hrs
<ul style="list-style-type: none"> <li>• Bed cradle</li> <li>• foot board,</li> <li>• side rails,</li> <li>• bed lifter,</li> <li>• cardiac table,</li> <li>• back rest,</li> <li>• air cushion</li> <li>• sand bag,</li> <li>• pillow,</li> <li>• bed block,</li> <li>• hot water bag,</li> <li>• air and water mattress</li> </ul>	
<b>Unit 9: Nursing Measures related to Meeting Nutritional Need of the Patient</b>	<b>8 hrs</b>
9.1 Definition and type of nutrition (Refer CHN I)	1 hrs
9.2 Types of diet used in hospital	1 hrs
9.3 Nurses responsibility in meeting nutritional need of the patient	2 hrs
<ul style="list-style-type: none"> <li>• Stimulating appetite</li> <li>• Preparing patient for meal</li> <li>• Preparing the environment</li> <li>• Attractive way of serving food</li> <li>• Assisting and supervising client's meal serving/ feeding</li> </ul>	
9.4 Ryle's (nasogastric) tube insertion and care	2 hrs
<ul style="list-style-type: none"> <li>• Purposes</li> <li>• Sizes and types</li> <li>• Indication</li> <li>• Method of insertion</li> <li>• Nurses responsibilities</li> <li>• Removal of nasogastric tube</li> </ul>	
9.5 Feeding helpless patient	2 hrs
<ul style="list-style-type: none"> <li>• Ryle's tube feeding Gastrostomy/Jejunostomy feeding</li> <li>• Total parenteral nutrition</li> </ul>	
<b>Unit 10: Nursing Measures related to Elimination Needs of the patient</b>	<b>10 hrs</b>
10.1 Distension of Bladder	1 hrs
<ul style="list-style-type: none"> <li>• Definition</li> <li>• Causes and sign and symptoms</li> <li>• Ways of relieving bladder distension</li> </ul>	
10.2 Catheterization	2 hrs
<ul style="list-style-type: none"> <li>• Definitions, Purpose , Principles and Types of catheterization</li> <li>• Catheterization to the patient: step by step procedure</li> </ul>	

<ul style="list-style-type: none"> <li>• Care of patient with an indwelling catheter</li> <li>• Removing the indwelling catheter</li> </ul>	1 hrs
10.3 Distension abdomen	1 hrs
<ul style="list-style-type: none"> <li>• Definition</li> <li>• Causes and sign and symptoms</li> </ul>	
10.4 Constipation	2 hrs
<ul style="list-style-type: none"> <li>• Definition</li> <li>• Sign and symptoms</li> <li>• Ways of relieving constipation</li> <li>• Enema <ul style="list-style-type: none"> <li>- Definition, Purposes and principles</li> <li>- Types</li> <li>- Method of administering enema</li> </ul> </li> <li>• Ezevac enema</li> <li>• Rectal Suppository</li> <li>• Insertion of flatus tube</li> </ul>	
10.5 Diarrhea: Meaning, Causes, sign and symptoms, and Management (refer CHN I)	1 hrs
10.6 Gastric Aspiration	1 hrs
10.5 Use of bedpans and urinals	1 hrs
10.6 Maintaining intake and output chart	1 hrs

### **Unit 11: Measures to Provide Safety**

**8 hrs**

11.1 hazards in hospital	2 hrs
<ul style="list-style-type: none"> <li>• Medical hazards</li> <li>• Chemical hazards</li> <li>• Biological hazards</li> <li>• Radiological hazards</li> <li>• Electrical hazards</li> <li>• Fire hazards</li> <li>• Sharp hazards</li> <li>• Physical hazards</li> </ul>	
11.2 Safety Measures	2 hrs
<ul style="list-style-type: none"> <li>• Use of side rails</li> <li>• Use of Restraints: physical, chemical</li> <li>• Maintaining safe environment: water, fire , ventilation, lightning, floors, room temperature, fall and infection control</li> </ul>	
11.3 Body Mechanics:	1 hrs
<ul style="list-style-type: none"> <li>• Principles of body mechanics</li> <li>• Technique of maintaining body mechanics</li> </ul>	
11.4 Moving and turning a patient	2 hrs
<ul style="list-style-type: none"> <li>• Moving a patient up in a bed</li> <li>• Turning a patient to the lateral position and prone position</li> <li>• Assisting a patient to sitting position</li> <li>• Transferring patient between Bed and stretcher</li> <li>• Transferring patient between Bed and chair</li> <li>• Ambulation to a patient</li> </ul>	

<ul style="list-style-type: none"> <li>• Log rolling a patient</li> </ul>	
11.5 Newtons first law of motion	1 hrs
<b>Unit 12: Dressing and Bandaging</b>	<b>5 hrs</b>
12.1 Wound care: Definition, Types of wound, Process of wound healing	1 hrs
12.2 Dressing : Definition, types, purpose, principles and Techniques	1 hrs
12.3 Suturing: Introduction, Types of suture, Removal of sutures	1 hrs
12.4 Care of patient with types of drainage tube	1 hrs
12.5 Bandaging : Definition, Type	1 hrs
<b>Unit 13: Exercise</b>	<b>4 hrs</b>
13.1 Exercise: Definition, Types of Exercise	1 hrs
13.2 Range of motion exercise: Definition, purpose, principles, and step by step procedure of ROM.	1 hrs
13.3 Deep breathing and coughing exercise: Purpose, principle and procedure	1 hrs
13.4 Postural drainage: Purpose, Principles and procedures	1 hrs
<b>Unit 14: Hot and Cold application</b>	<b>3 hrs</b>
14.1 Hot and Cold applications	2 hrs
<ul style="list-style-type: none"> <li>• Definition, purposes and principles</li> <li>• Effect of hot and cold application</li> <li>• Types and methods of hot and cold application</li> <li>• Nursing responsibilities.</li> </ul>	
14.2 Sitz Bath	1 hrs
<b>Unit 15: Pre and Post-operative Nursing Care of Patient</b>	<b>4 hrs</b>
15.1 Pre-operative care	2 hrs
Client preparation:	
<ul style="list-style-type: none"> <li>• physical, psychological,</li> <li>• Pre- operative medication</li> <li>• Inform written consent</li> <li>• Health teaching</li> <li>• Pre operative checklist</li> </ul>	
15.2 Post-operative care	2 hrs
<ul style="list-style-type: none"> <li>• Immediate care: Care at recovery room</li> <li>• Post operative</li> <li>• Care during 24 hour</li> <li>• Care in surgical ward</li> <li>• Discharge teaching/follow up care</li> </ul>	
<b>Unit 16: Pain Management</b>	<b>3 hrs</b>
16.1 Definition, types and characteristics	0.5 hrs
16.2 Physiology of pain	0.5 hrs
16.3 pain assessment: subjective and objective method	1 hrs
16.4 pain management: pharmacological and non-pharmacological	1 hrs
<b>Unit 17: Client Nurse Interaction</b>	<b>4 hrs</b>
17.1 Stress and adaptation	2 hrs

• Definition of stress and stressor	
• Sources of stress	
• Response to stress: physiological, psychological, behavioral response	
• Effect of stress on health	
• Coping strategies	
17.2 Factors affecting client's and family's response to stress	1 hrs
17.3 Helping the patient/family with stress	1 hrs
<b>Unit 18: Drug Administration</b>	<b>6 hrs</b>
18.1 Administration of drug	1 hrs
• Definition, purpose,	
• Abbreviations used in drug administration	
• Right of drug administration	
• Medicine calculation and measurement	
18.2 Different routes for drug administration	1 hrs
• Types, purpose, principles , preparation, procedure of administration of Oral, Parental, Topical, Instillation and Inhalation	
18.3 Care of Client with intravenous infusion	0.5 hrs
18.4 Responsibilities of a nurse in drug administration.	0.5 hrs
18.5 Care of medicine and medicine cupboard	0.5 hrs
18.6 Oxygen Inhalation	1 hrs
• Purpose	
• Indication	
• Method of oxygen therapy	
• Safety precaution	
• Care of accessories used for oxygen therapy	
• Care of patient with oxygen inhalation	
18.7 Steam inhalation: purpose, principles, procedure	0.5hrs
18.8 Nebulization : purpose, principles and procedure	1 hrs
18.9 Blood Transfusion	1 hrs
<b>Unit 19: First Aid Management</b>	<b>8 hrs</b>
19.1 Definition, purpose, principles of first aid and Responsibilities of a first aider	2 hrs
19.2 Different Emergency conditions and their first aid management	4 hrs
• Drowning	
• Chocking	
• Burn	
• Frost bite	
• Fracture	
• Epistaxis	
• Hemorrhage	
• Shock	
• Poisoning	
• Foreign body in ear, nose and throat	
• Snake bite	
• Dog bite	
• Insect bite	

19.3 Cardio Pulmonary Resuscitation	1 hrs
19.4Triage	1 hrs

**Unit 20: Care of Dead Body** **2 hrs**

- Definition
- Signs of Death
- Nursing care of dying patient and their families
- Care of the body after death

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# Fundamental of Nursing (Clinical)

Total Hour: 630 (18 Weeks)

## Course Description

This course provides opportunity for the students to practice basic nursing skill and in applying knowledge learnt in the theory while providing nursing care to the clients. Clinical experience will be total 540 hours, on medical and surgical unit under continuous supervision. Students will do morning and evening duty in different wards.

## Course objectives:

- Develop skill in basic nursing procedures.
- Use nursing process provides nursing care to the clients.
- Apply different assessment technique to identify the needs and problems of the patient
- Develop nursing care plan
- Implement different nursing measures to fulfill comfort, nutritional, elimination need of the patient
- Performs simple wound care and bandaging
- Apply safety measures and ethical practice in nursing care
- Administrate medication safely and correctly to a given patient
- Perform admission and discharge procedure
- Relate knowledge from basic sciences in preparing plan and providing care.
- Provide health education according to need of the client
- Demonstrates ability to form a relationship with patients and families establishing trust.
- Apply the principles of infection prevention by maintaining universal precaution and using personal protective barriers
- Demonstrate attitude of concern and interest toward patients and families.
- Demonstrate accountability and effectively communicate with patient, their families and other professionals.
- Record and report patient's condition and progress adequately

## Unit 1: Introduction to the Clinical Practice

- 1.1 Organizational rule and regulation
- 1.2 Different units in a hospital.
- 1.3 Routine activities of unit

## Unit 2: Application of the Nursing Process

### 2.1 Assessment:

Student will assess the patient through:

- Taking history through interview with patient and care takers
- Physical examination using Inspection, Palpitation, Percussion, Auscultation
- Vital signs measurement
- Height and weight measurement
- Medical record, Diagnostic test reports
- Urine testing for sugar and albumin
- Identification of problems

## 2.2 Planning:

- Student will write nursing care plans based on her/his assessment of the patients.
- Nursing care plan including problem of the patient's, action needed to solve the problem and evaluation of the action

## 2.3 Implementation:

Student will take responsibility of direct care and provide conducive environment for health and recovery for illness. Each student will develop knowledge and skill of safe and ethical practice drugs and administration.

Students Develop competency in basic nursing skill according to client's need in the following areas:

- **Meeting the hygienic needs of the patient**

- Mouth care
- Skin care
- Back care and relief of pressure areas
- Nail care
- hair wash and hair combing
- Pediculosis treatment
- Eye care

- **Provide comfort**

- Making different types of comfortable bed
- Keeping the environment clean
- Placing patients in different comfortable positions
- Using different comfort devices

- **Meeting nutritional needs of patient**

- Proper use of food, water, ventilation, light, supplies and equipment.
- Recognize his daily food habits, his like and dislikes
- Encourage food containing fibers ( Student can make a poster or display of food containing fibers)
  - Assisting in feeding helpless patients
  - Gastric (Ryle's) tube insertion and feeding
  - Preparing rehydration solutions
  - Maintain intake and output
  - Find out daily alimentation habit of patients

- **Meeting elimination needs:**

- Encourage abdominal exercise
- Give enema and rectal suppository
- Ambulate patient
- Stimulate for urination by pouring cold or hot water over perineal area and over bladder area
- Catheterization

- **Preventing infection and complication:**

- Maintain aseptic technique: Practicing hand washing technique
- Using appropriate personal protective equipment (PPE)
- Maintaining strict isolation

- Observing different method of sterilization (Student spends one week in central supplies department)
- **Providing and Teaching the following measure to promote body function and prevent chest complication**
  - Deep breathing and coughing exercises
  - Active and passive exercises
  - Early ambulation
  - Postural drainage
  - Steam inhalation
  - Using nasal catheter, mask and tent for O2 administration
- **Practice the application of heat and cold to body parts**
- **Develop competency in dressing and bandaging.**
  - Perform Dressing for simple wound
  - Remove sutures
  - Care of drainage
  - Perform different type of bandage
- **Collecting and labeling and sending specimen of urine blood and sputum to the laboratory**
- **Administrating medication:**
  - Calculate, give medication, injection by observing the right of the medication
  - Caring the patients with intravenous infusion
- Providing pre -operative care and post-operative care
- Admission and discharge of a patient
- Provide care of death and dying patient and their families
- Give health teaching according to patient need and report and record pertinent information about the patient's condition

#### **4 Evaluations**

- Student will evaluate the progress outcome of nursing care on discharge.

# Community Health Nursing I (Theory)

**Theory: 120 hours**

## Course Description

This course is designed to provide students with basic knowledge in community health nursing regarding concept of health and spectrum of health, primary health care, communication, nutrition, epidemiology, health statistics and indicators, community diagnosis, environmental health and sanitation, family planning, national immunization programme, occupational health hazards, and pollution hazards. This course focuses on the primary health care approach in providing care to individual, family and community people.

## Course Objectives

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

1. Interpret fundamental concepts of health and spectrum of health and illness.
2. Identify social determinants of health
3. Discuss level of prevention and intervention
4. Identify the roles and functions of the community/public health nurse
5. List the elements and basic principles of primary health care
6. Describe communication skills effectively in providing primary healthcare to the individual client, family and group.
7. Explain the scope of nursing outside the hospital.
8. Illustrate population problem and the need for Family Planning (FP) in Nepal.
9. Describe the function of nutrition in health promotion and disease prevention of the individual, family and community.
10. Discuss the use of epidemiological approach to solve health problems in community.
11. Explain the national immunization programme of Nepal.
12. Explain different types of environmental health and sanitation.
13. Explain the safety measures for the prevention of occupational health hazards.
14. Explain community health diagnosis.
15. Describe the ways in attaining optimum health of the individual, family and community.
16. Define the various indicators used in community/public health

## Unit 1: Introduction to Health

**8 hrs**

### 1.1 Concept of health and disease

1hrs

- Definition of health, disease and illness by WHO
- Spectrum of health and illness

### 1.2 Dimension of health

1hrs

- Physical
- Mental
- Psychological
- Social

### 1.3 Social determinants of health (WHO 2011)

**2 hrs**

- Individual lifestyle factors: Age, sex and hereditary factors
- Social and community networks
- General socio-economic, cultural and environmental conditions

<ul style="list-style-type: none"> <li>- Agriculture and food production</li> <li>- Education</li> <li>- Work environment</li> <li>- Living and working conditions</li> <li>- Unemployment</li> <li>- Water and sanitation</li> <li>- Health care services</li> <li>- Housing</li> </ul>	
<ul style="list-style-type: none"> <li>• Importance of social determinants of health</li> <li>- Social determinants of health have a direct impact on health</li> <li>- Social determinants predict the greatest proportion of health status variance (health inequity)</li> <li>- Social determinants of health structure health behaviours</li> <li>- Social determinants of health interact with each other to produce health</li> </ul>	1 hrs
1.4 Public and community health	1 hrs
<ul style="list-style-type: none"> <li>• Definition community health, public health, population health</li> <li>• Definition of community health nursing, public health nursing</li> <li>• Goals of community health nursing, public health nursing</li> </ul>	
1.5 Level of prevention	1 hrs
<ul style="list-style-type: none"> <li>• Primary prevention</li> <li>• Secondary prevention</li> <li>• Tertiary prevention</li> </ul>	
1.6 Level of intervention	1 hrs
<ul style="list-style-type: none"> <li>• Individual-focused (personal health)</li> <li>• Community-focused (population or sub-group)</li> <li>• System-focused (policy and law, rules, regulations, procedures, guidelines)</li> </ul>	
1.7 Major roles and functions of the nurse in community/public health	1 hrs
<ul style="list-style-type: none"> <li>• Disease prevention specialist</li> <li>• Educator</li> <li>• Advocate</li> <li>• Collaborator</li> <li>• Leader</li> <li>• Researcher</li> <li>• Clinician as a Care provider/giver</li> <li>• Change agent</li> </ul>	
<b>Unit 2: Primary Health Care</b>	<b>6 hrs</b>
2.1 Definition of primary health care	0.5 hrs
2.2 Elements of primary health care	0.5 hrs
<ul style="list-style-type: none"> <li>• Preventing and controlling health problems</li> <li>• Promotion of food supply and nutrition</li> <li>• Basic sanitation and safe water</li> <li>• Maternal and child health/family planning</li> <li>• Immunization against major infectious diseases</li> <li>• Prevention and control of endemic disease</li> <li>• Treatment of common diseases and injuries</li> <li>• Provision of essential drugs</li> <li>• Mental health</li> </ul>	

- Dental health
- 2.3 Basic principles of primary health care 1 hrs
- Accessibility of health service to all populations
  - Maximum individual and community involvement in the planning and implementation of health care services
  - Emphasis on service that are preventive and promotive rather than curative only
  - Use of appropriate technology
  - Integration of health development with overall social and economic development
- 2.4 Major challenges of PHC in context of Nepal 2 hrs
- Population overgrowth
  - Malnutrition
  - Poor environmental sanitation
  - Infectious diseases
  - Economic status
  - Educational status
  - Gender discrimination
  - Health service delivery
  - Infrastructures
  - Prevailing social values, norms and belief
- 2.5 Role of the nurse in primary health care 1 hrs
- Service provider
  - Manager
  - Educator
  - Supervisor
  - Trainer
  - Motivator
  - Leader
  - Change agent
  - Facilitator
  - Counsellor
- 2.6 Primary Health Care Revitalization in Nepal 1 hrs
- Introduction
  - Components and Key functions of Primary Health Care Revitalization Division (PHCRD) Programme
  - PHCRD's vision, goal and objectives
  - Issues, challenges and actions
- Unit 3: Nursing Practice in the community** **2 hrs**
- 3.1 Scope of nursing outside the hospital 1 hrs
- MCH/FP Clinic
  - School health
  - Public health nursing service
  - Home based care- nursing home

- Occupational health
- Industrial nursing service
- Domiciliary nursing service
- Rehabilitation centre
- Mental health nursing service
- Ageing people home/centre

3.2 Role of community/public health nurse outside the hospital 1 hrs

**Unit 4: Communications 8 hrs**

4.1 Definition, aims and importance of communication 0.5 hrs

4.2 Elements of communication 0.5 hrs

- Speaker
- Message
- Encoding
- Channel/medium
- Decoding
- Receiver
- Feedback

4.3 Types of communication and counseling 1 hrs

- Verbal and non-verbal
- Interpersonal and intrapersonal
- Listening and interviewing
- Counselling
- Teaching /health education
- Human caring (empathy)

4.4 Barriers of effective communication 1 hrs

- Socio-cultural background (of communication actors)
- Literacy and education level
- Language
- Experience and exposure
- Occupation
- Professional, educational and other biasness

4.5 Keys to overcoming barriers of communication 1 hrs

4.6 Importance of interpersonal relationships with 1 hrs

- Clients
- Health personnel
- Community

4.7 Interviewing in community 1 hrs

- Definition, aims and types of interview
- Technique for successful interview in community situation

<b>Unit 5: Introduction to Epidemiology</b>	<b>10 hrs</b>
5.1 Definition of epidemiology	1 hrs
5.2 Epidemiological	4 hrs
• Infection	
• Epidemic	
• Endemic	
• Sporadic	
• Communicable diseases	
• Non-communicable diseases	
• Incubation period	
• Isolation	
• Carrier	
• Fomites	
• Virulence	
• Disinfection	
• Sterilization	
• Contamination	
• Zoonosis	
• Nosocomial infection	
• Eradication	
• Infestation	
• Infectious disease	
• Contagious	
• Pandemic	
• Exotic	
• Epizootic	
• Enzootic	
• Opportunity infection	
• Surveillance	
• Pollution	
5.3 Concept of disease	1 hrs
• Agent, Host, Environment	
5.4 Modes of disease transmission	1 hrs
• Direct transmission	
• Indirect transmission	
5.5 Epidemiological approach to solve community health problems	1 hrs
• Asking questions	
• Making comparison	
5.6 Steps of investigation of epidemic diseases	2 hrs
• Verification of diagnosis	
• Confirmation of the existence of an epidemic	
• Defining the population at risk	
• Rapid search	
• Evaluation of the ecological factors	
• Further investigation of the population at risk	
• Formulate the hypothesis	

- Data analysis
- Writing the reports

**Unit 6: Health indicators and statistics** **8 hrs**

6.1 Definition of various health indicators 4 hrs

- Crude birth rate
- Crude death rate
- Infant mortality rate
- Morbidity rate
- Perinatal mortality rate
- Stillbirth rate
- Neonatal mortality rate
- Maternal mortality rate
- Incidence rate
- Prevalence rate
- Life expectancy
- General fertilization rate
- Total fertility rate
- Contraceptive prevalence rate

6.2 Use of vital and health statistics 2 hrs

- Measurement of state of health
- Comparison of health status
- Planning
- Evaluation
- Research

6.3 Sources of vital and health statistics 2 hrs

- Census
- Registration
- Notification
- Records
- Health survey

**Unit 7: Community Health Diagnosis** **10 hrs**

7.1 Definition aims and purpose of community diagnosis 1 hrs

7.2 Steps of the community health diagnosis process 1 hrs

- Preparation of tools, techniques and work plan
- Pre-testing of instruments
- Rapport building
- Data collection
- Data processing, analysis and interpretation
- Community presentation
- Planning and implementation of the Micro Health Project
- Evaluation and recommendation

7.3 Components of community health diagnosis 1 hrs

- Demographic characteristics
- Social, economic and geographic characteristics

- Environmental health and sanitation
- Knowledge, attitude and practice (KAP) on health and health issue
- Maternal and child health
- Morbidity and disability
- Availability of health services and its utilisation
- Community resources
- Community leaders
- Culture and tradition

7.4 Difference between community and clinical diagnosis 1 hrs

7.5 Data Collection 4 hrs

- Functions and characteristics of primary and secondary data
- Functions and characteristics of qualitative and quantitative data
- Purposes and characteristics of census and sample survey
- Methods of sampling
  - a. Probability sampling
    - Simple random sampling
    - Systematic (random) sampling
    - Stratified sampling
    - Cluster sampling
    - Multistage sampling
  - b. Non-probability sampling
    - Purposive/convenience sampling
- Methods of data collection
  - a. Use of questionnaire
  - b. Observation with checklist
  - c. Interview
  - d. Focus group discussion
  - e. Participatory Rural Appraisal (PRA)
  - f. Rapid Rural Appraisal (RRA)
- Home visiting
  - a. Introduction, purpose, principles and advantages of home visiting
  - b. Steps in home visiting
    - Fact finding
    - Data finding
    - Planning action with family
    - Action and health education
    - Follow up
    - Evaluation of services
  - c. Bag technique (home visiting bag)
    - Use and care
    - Equipments /materials in home visiting bag
- Ethical issues in community diagnosis
- Data processing
  - a. Application of data processing steps
    - Data editing
    - Data coding

- Data tabulation
- Data analysis and interpretation
- Data presentation
- Community presentation
  - a. Important functions of a community presentation
    - To inform
    - To motivate for action
    - To involve community members
  - b. Steps of community presentation
- Micro Health Project (MHP)
  - a. Health needs assessment
    - Felt health needs
    - Observed health needs
    - Real health needs
  - b. Principles of needs assessment
  - c. Introduction of a micro health project
  - d. Steps of a micro health project
    - Planning of the MHP
    - Implementing of the MHP
    - Evaluation of the MHP
- Report Writing
  - a. Important benefits of report writing
  - b. Components of project report writing
    - Title/Title page
    - Acknowledgement
    - Preface/Forward
    - Abstract/Summary
    - Contents
    - Map/Study Area
    - Project Summary
      - Brief introduction
      - Major findings and discussion
      - Conclusion and recommendations
    - References/Bibliography
    - Annex

## **Unit 8: Nutrition**

8.1 Digestive system (Review from Basic science)	<b>10 hrs</b>
8.2 Definition of nutrition	0.5 hrs
8.3 Relationship between nutrition and health	0.5 hrs
<ul style="list-style-type: none"> <li>• Growth and development</li> <li>• Specific deficiencies</li> <li>• Resistance to infection</li> <li>• Mortality and morbidity</li> </ul>	1 hrs
8.4 Main function of food	1 hrs
<ul style="list-style-type: none"> <li>• Provision of energy</li> <li>• Body building and repair</li> <li>• Maintenance and regulations of tissue functions</li> </ul>	

8.5 Nutrients	1 hrs
• Definition, functions, classification, sources, deficiencies diseases	
• Macro nutrient: Protein, fats and carbohydrate	
• Micro nutrient: Vitamins and minerals	
8.6 Meaning of balanced diet	1 hrs
8.8 Home garden	1 hrs
• The importance of kitchen garden/home garden	
8.9 Food security- Policy of Government of Nepal	1 hrs
8.10 Milk pasteurization	1 hrs
• Definition of milk pasteurization	
• Methods of milk pasteurization	
• Test for pasteurized milk	
8.11 Food adulteration	1 hrs
• Define food adulteration	
• Various food adulteration practices	
• Public health significance of food adulteration	
• Food act and laws	
8.12 National Nutrition programme	1 hrs
<b>Unit 9: Health Education</b>	<b>8 hrs</b>
9.1 Concept of health education	1 hrs
• Introduction	
• Definition	
• Objectives	
• Principles	
• Contents	
9.2 Methods of health education: Introduction, purposes, advantages, disadvantages and process	1 hrs
• Individual	
• Group	
• Mass	
.1 Individual Method	
- Interview	
- Counselling	
2. Group Methods	
- Small group discussion	
- Focused group discussion	
- Role play	
- Demonstration	
- Field trips	
- Brain storming	
- Panel discussion	
- Problem solving	
- Symposium	
- Seminar	
- Workshop	

3. Mass methods	
<ul style="list-style-type: none"> <li>- Health campaign</li> <li>- Advertisement</li> <li>- Display board as teaching board</li> <li>- Electronic projected aid</li> <li>- Lectures</li> <li>- Exhibition</li> </ul>	
9.3 Media of health education	2 hrs
Media: Definition, purpose and types	
Types:	
<ul style="list-style-type: none"> <li>• Auditory aids <ul style="list-style-type: none"> <li>- Radio, Mobile phone</li> </ul> </li> <li>• Visual aids <ul style="list-style-type: none"> <li>- Black/white board with chalk/marker</li> <li>- Bulletin board</li> </ul> </li> <li>• Audio-visual aids <ul style="list-style-type: none"> <li>- Over Head Projector (OHP)</li> <li>- Multimedia Projector</li> <li>- Television</li> </ul> </li> </ul>	
9.4 Use of methods and media for health education	2 hrs
<ul style="list-style-type: none"> <li>• Criteria for selecting methods and media of health education</li> <li>• Feasibility and practicability</li> <li>• Nature of audience</li> <li>• Peoples attitude and belief</li> <li>• Acceptability</li> <li>• Subject or purpose of teaching</li> </ul>	
9.5 Evaluation of health education	2 hrs
<ul style="list-style-type: none"> <li>• Importance</li> <li>• Methods/Ways</li> <li>• Subject matter</li> <li>• Time</li> <li>• Technique</li> </ul>	
<b>Unit 10: Family Planning</b>	<b>10 hrs</b>
10.1 Definition family planning	0.5 hrs
10.2 Health aspects of family planning	1 hrs
<ul style="list-style-type: none"> <li>• Women's health and women's empowerment</li> <li>• Perinatal health</li> <li>• Infant and child health</li> </ul>	
10.3 Population problems and need for family planning in Nepal	2 hrs
<ul style="list-style-type: none"> <li>• Definition of Contraception, Contraceptive</li> <li>• Types/methods: Modern and traditional contraceptive methods <ul style="list-style-type: none"> <li>- Modern Contraceptive methods: Short-acting contraceptives, long-acting reversible contraceptives (LARC), and permanent methods</li> <li>- Traditional contraceptive methods: Natural methods</li> </ul> </li> <li>• Mechanism of action</li> <li>• Impact of high fertility</li> </ul>	

- Advantages and disadvantages
  - Family planning service and programme available in Nepal
  - Government and non- government agencies
  - International and bilateral assistance in FP
- 10.4 Use of "ABHIBADAN" for family planning counseling 0.5 hrs
- Definition of FP counselling
  - Principles, Benefits
  - ABHIBADAN Process (GATHER)
- 10.5 Approach for FP counseling 0.5 hrs
- Process of counselling using ABHIBADAN process
  - Counselling skill in informed choices process
  - Temporary and permanent methods of family planning.
- 10.6 Temporary modern contraceptive methods: Introduction, advantages, disadvantages, action, side effect, management and referral 1 hrs
1. Short acting contraceptive
    - Condom (Male and female)
    - Oral contraceptive pills
    - Injectable hormones
    - Spermicides: Foam tab, jelly and paste
    - Mechanical methods: Diaphragm and cervical caps
  2. Long-action reversible contraceptive (LARC) methods
    - Intrauterine contraceptive devices (IUCD)
    - Mechanical and chemical combination
    - Physiological
    - Norplant implant
  3. Traditional contraceptive methods
    - Behavioural methods: Coitus interrupt, safe period, basal, body temperature, calendar method, LAM
- 10.7 Permanent contraceptive methods/voluntary surgical sterilization 1 hrs
- Introduction, advantages, disadvantages, action side effects
    - Minilap/Tubectomy
    - Vasectomy,
    - Laparoscopy
- 10.8 Emergency Contraception 0.5 hrs
- Indication and Type
  - Administration and follow up
- 10.9 Post abortion contraception 0.5 hrs
- 10.10 Contraception for adolescent and women of above 35 Years 0.5 hrs
- 10.11 Client assessment 1 hrs
- Self-breast exam
  - Bimanual pelvic examination
- 10.12 Role of nurse in family planning clinic 2 hrs
- Preparation of physical set up of FP clinic (use of antiseptics and disinfectants infection prevention concept)
  - Preparation and sterilization of equipment and supplies
  - Preparation of clients (Pelvic exam, breast exam, general screening exam)
  - Post procedure responsibilities

- Record and report
- Health education

**Unit 11: Immunization** **6 hrs**

11.1 Immunity (Review from basic science related to health) 2 hrs

- Definition
- Classification of immunity
  1. Natural immunity
  2. Acquired immunity

11.2 National Immunization Programme (NIP) 2 hrs

- Introduction, types of immunization, target, indication/contraindication, route, side effects and national immunization schedule
  - BCG, DPT-HepB-Hib, Oral polio vaccine (OPV), Inactivated polio vaccine (IPV), Pneumococcal conjugate vaccine (PCV), Measles-Rubella (MR), Japanese Encephalitis (JE), Low dose Diphtheria Toxoid (Td), Human Papilloma Virus (HPV)

11.3 Health teaching for mothers/parents and pregnant women 2 hrs

**Unit 12: Environmental Health and Sanitation** **16 hrs**

12.1 Environmental sanitation and its components 1 hrs

- Definition: Environmental health, Environmental sanitation, Ecohealth
- Component of environment

12.2 Refuse 1 hrs

- Definition
- Methods of refuse disposal
  1. Burning and tipping
  2. Controlled tipping
  3. Composting and burial
  4. Manure pit
  5. Earth worm plant
- Method of human excreta disposal
  1. Service type
  2. Non-service type

12.3 Transmission of faecal-borne diseases through 1 hrs

- Water, food, finger, soil and flies

12.4 Sewage 1 hrs

- Definition of sewage
- Methods of sewage disposal
  - Sea outfall, River outfall, Land treatment, Oxidation ponds and Open drainage
  -

12.5 Health Care Waste Management 9 hrs

12.5.1 Waste :

- Definition
- Types

12.5.2 Health Care Waste

- Definition
- Types

<ul style="list-style-type: none"> <li>• Categories and Segregation of HCW</li> </ul>	
12.5.3 Impact of Health Care Waste on Environment and Public Health	
12.5.4 Risk related to Health Care Waste	
<ul style="list-style-type: none"> <li>• Overview of Hazard</li> <li>• Types of Hazard</li> <li>• Person at Hazard</li> <li>• Hazard from different types of Health Care Waste</li> </ul>	
12.6 WASH	
<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Water <ul style="list-style-type: none"> <li>- Requirement of water</li> <li>- Parameters of safe drinking water</li> </ul> </li> <li>• Sanitation <ul style="list-style-type: none"> <li>- Requirement of sanitation</li> <li>- Access and functionality of sanitation</li> </ul> </li> <li>• Hygiene <ul style="list-style-type: none"> <li>- Hand washing</li> <li>- Use of gloves</li> </ul> </li> </ul>	
12.7 Rodents	2 hrs
<ul style="list-style-type: none"> <li>• Definition</li> <li>• Types of rodents <ol style="list-style-type: none"> <li>1. Domestic rodents</li> <li>2. Wild rodents</li> </ol> </li> <li>• Control of rodents <ul style="list-style-type: none"> <li>- Trapping</li> <li>- Rat poisons or rodenticides</li> <li>- Fumigation</li> <li>- Improvement of sanitation</li> </ul> </li> </ul>	
<b>Unit 13: Water</b>	<b>6 hrs</b>
13.1 Define safe and wholesome water	1 hrs
13.2 Uses of water	1 hrs
<ul style="list-style-type: none"> <li>• Domestic uses</li> <li>• Public uses</li> <li>• Industrial uses</li> <li>• Agricultural uses</li> </ul>	
13.3 Daily requirement of water for a person	1 hrs
13.4 Sources of water and its impurities	1 hrs
<ul style="list-style-type: none"> <li>• Rain water</li> <li>• Surface water</li> <li>• Ground water</li> </ul>	
13.5 Water-borne diseases	1 hrs
<ul style="list-style-type: none"> <li>• Biological</li> <li>• Chemical</li> </ul>	
13.6 Purification of water	1 hrs
<ul style="list-style-type: none"> <li>• Large scale</li> </ul>	

- Slow sand or biological filter
- Rapid sand or mechanical
- Filter
- Small scale
  - Filter
  - Boiling
  - Disinfection of well

<b>Unit 14: Housing</b>	<b>8 hrs</b>
14.1 Criteria for healthful housing	1 hrs
14.2 Housing needs for human being	2 hrs
<ul style="list-style-type: none"> <li>• Physical needs</li> <li>• Psychological needs</li> <li>• Health needs and</li> <li>• Protective need</li> </ul>	
14.3 Standards of housing	2 hrs
<ul style="list-style-type: none"> <li>• Site, open space, walls floor, roof, rooms, floor space, doors and windows and facilities</li> </ul>	
14.4 Effects of poor housing on health	2 hrs
<ul style="list-style-type: none"> <li>• Respiratory infections</li> <li>• Skin infections</li> <li>• Accidents</li> <li>• Mortality and morbidity</li> <li>• Rat infestation</li> <li>• Psychological effects</li> <li>• Arthropods</li> </ul>	
14.5 Standard of living and Quality of life	1 hrs
<b>Unit 15: Occupational Health</b>	<b>2 hrs</b>
<ul style="list-style-type: none"> <li>• Definition</li> <li>• Occupational health hazards</li> <li>• Safety measures in work place</li> <li>• The safety measures regarding occupational health in work place</li> </ul>	
<b>Unit 16: Pollution Hazards</b>	<b>2 hrs</b>
<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Types of pollution hazards on health           <ul style="list-style-type: none"> <li>- Noise, air, water and land</li> </ul> </li> </ul>	

### Recommended Reference Texts

#### Introduction of Health

1. WHO (2013). Determinants of Health, Retrieved from [http:](http://)
2. WHO (2008). Social Determinants of Health, Retrieved from Ternopil State Medical University (2003). Roles and functions of the community health nurse, Institute of Nursing, Department of Clinical Immunology, Allergology and General Patient Care.
3. Mamata Manandhar, Community Health Nursing –I, kshav Publication, Kathmandu

### Primary Health Care

1. WHO/UNICEF (1978). Primary HealthCare: Health for All (series # 1), Geneva.
2. Reproductive Health, National and International Perspectives,

# Community Health Nursing – I (Practical)

**Total hours: 210 (6 weeks)**

## **Course Description**

This course helps the students to work in different community field and institutions. It provides opportunities to apply the concepts or primary health care while identifying health problems of individuals, families and communities.

The students will be divided into two groups: one group will be in the hospital setting and another group in the community. During their training period each student will conduct a small community survey and provide comprehensive care to at least two families. Total community field experience period is of 6 weeks, which will include visits to local institutions, families and apply the epidemiological approach to solve the identified problem. One community level health action will be conducted in a selected community. Weekly small group seminars will be held to discuss the problems faced during the field practice.

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

1. Identify the different places, besides hospitals where nursing care is provided.
2. Use the theoretical knowledge of primary health care in the community setting.
3. Identify the problems of clients in home situation.
4. Identify the problem and needs of community through community diagnosis.
5. Use the nursing process in dealing with individuals, families and the community in order to solve their health problems.
6. Plan and conduct community level health action to the groups of people by using the epidemiological approaches.
7. Use appropriate communication skills while helping clients in the community
8. Utilize the local resources in solving the problem in the community.
9. Advise the preservation of the nutrient values in the foodstuffs for the sake of good health.
10. Refer clients to appropriate places according to their needs.
11. Explain the gender status in the community/health facilities and provide gender friendly services to maintain the quality of care.
12. visit to different home

## **Social determinants of Health and Nursing in the community**

- Visit to different local institutions
- Industrial nursing (Brick, iron, textile, cement)
- Institution for the disabled, Rehabilitation center, Geriatric center, S.O.S. Center,
- Milk pasteurization center, Water plant of Municipalities and Hospitals
- Maintain log book
- Identification of GBV cases and refers to appropriate centers
- Providing gender friendly services
- Providing health education/actions for the family/community based on the identified needs with gender sensitive approach

## **Communication skills**

- Select two families with problems
- Make home visits

- Collect information about family
- Maintain inter-personal relationship

### **Primary health care**

- Observation of home environment
  - Sanitation, water supply, nutrition
  - Disposal of waste material, latrine
- Assessing the health need of children and refer to appropriate center, if necessary
- Helping families become more self-reliant regarding health by teaching them

### **Vital and health statistics**

- Source of vital and health statistics:
  - Census, registration, notification, records, health survey
- Analysis of data for statistical representation and recommendation for improvement
  - Recommendation for improvement

### **Environmental health and sanitation**

- Assessing water supply, garbage, sewage disposal
  - Excreta disposal
- Methods of Improving Environment
  - Trapping
  - Rat poisons or rodenticides
  - Fumigation
  - Improving sanitation
  - Controlling of vermin (Rodents)

### **Local resources**

- Utilization of local resources such as:
  - Nutrition-food stuffs
  - Home equipment-supply
  - Manpower: parents/family members/others

### **Community health diagnosis and Micro Health Project**

- Community diagnosis
  - Select 5 families for community survey in defined area.
  - Collect the data by using prescribed survey format.
  - Analyze data for statistical presentation.
- Carrying out health action by
  - Setting objectives, planning and implementing
  - Date, time, place, client, subject matter, AV Aids and physical set up etc.
- Community-level health action of one selected problem in community setting

### **Recording and report**

- Write daily log book, observation visit reports and submit final survey report

# Anatomy and Physiology

**Theory: 100 hours**

## Course description

This course provides basic knowledge of the normal structure and function of the systems of the human body. The content prepares the student to understand how the body system works together and its relation among all body systems.

## Objectives

After completion of this course the student will be able to:

- Identify the different parts of the human body.
- Describe the structure of different parts of human body.
- Explain the interrelationship of the body systems.
- Explain the physiology of different systems.

<b>Unit 1: System Approach to the Human Body</b>	<b>6 hrs</b>
1.1 Definition of Anatomy, physiology; various suffix and prefix used in anatomy and physiology	0.5 hrs
1.2 Define different terminologies used in various systems	1.5 hrs
1.3 Main cavities: Cranial, thoracic, abdominal, and pelvic.	1 hrs
1.4 Anatomical position of the body: anterior, posterior superior, inferior, proximal, distal, dorsal, ventral, palmer, lateral, supine, prone,	1.5 hrs
1.5 Range of motion: Flexion, extension, abduction, adduction, rotation, circumduction, supination, pronation, opposition,	1.5 hrs
<b>Unit 2: Introduction to cells and tissues</b>	<b>6 hrs</b>
2.1 The structure and functions of human cell	1 hrs
2.2 Cell division: Mitosis, Meiosis	1 hrs
2.3 The structure and function of tissues: Epithelial tissue, connective tissue, muscular tissue, nervous tissue	2 hrs
2.4 Structure and functions of membranes, gland, cartilage	2 hrs
<b>Unit 3: Body Fluid and Electrolyte</b>	<b>10 hrs</b>
3.1. Body fluid and electrolyte	5 hrs
• Fluid and electrolyte distribution	
• Intracellular fluid	
• Extracellular fluid	
• Important function of body fluid	
• Body fluid and electrolyte balance	
• Importance of fluid and electrolyte balance in health	
3.2. Acid base balance	5 hrs
• Definition of acid and base	
• Mechanism to maintain acid base balance	
➤ Respiratory system	
➤ Urinary system	
➤ Buffer mechanism	

<b>3.3. Fluid and electrolyte imbalances</b>	<b>3 hrs</b>
Different conditions related to fluid and electrolyte imbalance	
<ul style="list-style-type: none"> <li>➤ Dehydration/ Overhydration</li> <li>➤ Hypo/Hyperkalemia</li> <li>➤ Hypo/Hybernatriemia</li> <li>➤ Hypo/Hypercalcemia</li> <li>➤ Hypo/Hypermagnesemia</li> <li>• Ways of replacement <ul style="list-style-type: none"> <li>➤ Oral rehydration therapy</li> <li>➤ Naso-gastric feeding</li> <li>➤ Intravenous therapy: Types of rehydration solution <ul style="list-style-type: none"> <li>➤ Hypertonic</li> <li>➤ Hypotonic Isotonic</li> </ul> </li> </ul> </li> </ul>	
<b>Unit 4: Introduction to Circulatory System</b>	<b>9 hrs</b>
4.1 Circulatory system	3 hrs
<ul style="list-style-type: none"> <li>• Structure and functions of heart</li> <li>• Cardiac cycle</li> <li>• Conduction system</li> <li>• Heart sound</li> <li>• Normal blood flow</li> <li>• Blood <ul style="list-style-type: none"> <li>➤ Composition of blood: Cells, Plasma, Coagulation factors</li> <li>➤ Functions of blood</li> <li>➤ Blood grouping and Rhesus factor</li> </ul> </li> </ul>	
4.1 Blood Vessels	3 hrs
4.1 Structure and Function of blood vessels	
4.2 Main blood vessels and their branches	
<ul style="list-style-type: none"> <li>- Blood Pressure</li> <li>- Pulse</li> </ul>	
4.3 Different kinds of circulation	3 hrs
<ul style="list-style-type: none"> <li>• Pulmonary circulation</li> <li>• Systematic circulation</li> <li>• Portal circulation</li> <li>• Fetal circulation</li> </ul>	
<b>Unit 5: Introduction to Lymphatic System</b>	<b>6 hrs</b>
5.1 Structure and function of lymphatic system	2 hrs
5.2 Lymphatic vessels	2 hrs
5.3 Lymphatic organs and tissue	2 hrs
<ul style="list-style-type: none"> <li>• Lymph nodes</li> <li>• Spleen</li> <li>• Thymus</li> <li>• Tonsils/ Peyer's patches</li> <li>• Immunoglobulin and its types</li> </ul>	

<b>Unit 6: Introduction to Muscular System</b>	<b>6 hrs</b>
6.1 Types, structure and functions of muscles	3 hrs
• Voluntary	
• Involuntary	
• Cardiac	
6.2 Principal skeletal muscle	3 hrs
• Muscles of the face, neck, trunk, shoulder and upper limb, hip and lower limb, pelvic floor	
• Action of the muscles in relation to force	
<b>Unit 7: Introduction to Skeletal System</b>	<b>8 hrs</b>
7.1 Definition: Bone, Joint	1 hrs
7.2 Development of bone	1 hrs
7.3 Suture and fontanelles	1 hrs
7.4 Types and function of Bones	1 hrs
• Long/short/flat/irregular/sesamoid	
7.5 Classification of skeleton	1 hrs
• Axial/ Appendicular	
7.6 Types and function of joints	1 hrs
• Fixed/cartilaginous/synovial	
• Mechanism of joint movement and its relation to the principles of lever	
7.7 Types/structure/functions of teeth	1 hrs
• Temporary/ Permanent	
7.8 Types of movement of bones	1 hrs
• Types of sinuses	
• Frontal/sphenoid/Ethmoid /Maxillary	
• Disorders (Introduction only)	
• Osteoporosis, Rickets, Osteomalasia, Osteomyelitis, Piget's disease, Tumors of bone, Arthritis, Carpel Tunnel syndrome	
• Fracture	
<b>Unit 8: Introduction to Respiratory System</b>	<b>8 hrs</b>
8.1 Structure and function of different parts of respiratory organs	1 hrs
8.2 Nose and nasal cavity, Sinuses, Pharynx, Larynx, Trachea, Lungs, Bronchi and Bronchioles, Alveoli	1 hrs
8.3 Respiratory muscles: Intercostals muscle and Diaphragm	2 hrs
8.4 Physiology of respiration	2 hrs
• External respiration	
• Internal respiration	
• Exchange of gases	
• Respiration in relation to Boyle's law	
8.5 Capacity of lung: tidal volume, inspiratory reserve volume, Inspiratory capacity, functional residual capacity, Expiratory reserve volume, residual volume, vital capacity,	2 hrs
<b>Unit 9: Introduction to Digestive System</b>	<b>8 hrs</b>
9.1 Definition	1 hrs
• Digestion	
• Digestive system	

9.2 Structure and function of digestive organs involved in digestive system: Mouth, Oesophagus, Stomach, Small intestine, Large intestine, Rectum, Anus	2 hrs
9.3 Structure and function of and its accessory organs: Pairs of salivary glands, pancreas, liver, biliary duct	2 hrs
9.4 Types/structure/functions of teeth	1 hrs
• Temporary/ Permanent	
9.5 Functions of digestive system	1 hrs
9.6 Physiology of digestion	1 hrs
<b>Unit 10: Introduction to Urinary System</b>	<b>4 hrs</b>
10.1 Structure and function of organs related to urinary system	1 hrs
• Kidney	
• Ureter	
• Urinary bladder	
• Urethra	
10.2 Composition and mechanism of urine formation	2 hrs
• Glomerular filtration	
• Selective reabsorption	
• Tubular secretion	
10.3 Mechanism of micturation	1 hrs
<b>Unit 11: Introduction to Nervous System</b>	<b>8 hrs</b>
11.1 Introduction, nerve, neuroglia, synapse, nerve transmission	1 hrs
11.2 Types of nerves	1 hrs
11.3 Mechanism of stimuli transmission	1 hrs
11.4 The central nervous system	2 hrs
• Covering membrane (meninges)	
• Cerebrum	
• Mid brain	
• Cerebellum	
• Brain stem	
• Ventricles	
• Spinal cord	
11.5 The peripheral nervous system	2 hrs
• Spinal nerve	
• Cranial nerve	
• Autonomic nervous system	
11.6 Neurones	1 hrs
• Mechanisms of stimuli transmitted in the nervous system –Reflex action	
• CNS- Brain and Spinal cord	
• PNS-Spinal cord and cranial nerves	
• ANS- Sympathetic and parasympathetic system	
<b>Unit 12: Introduction to Reproductive System</b>	<b>8 hrs</b>
12.1 Female reproductive organ	3 hrs
• Structure and functions of external and internal reproductive organs.	
• Primary and secondary sex characteristics	
• Mechanism of:	

➤ Puberty	
➤ Menstruation cycle.	
➤ Fertilization: Spermatogenesis, Oogenesis, Conception	
➤ Menopauseh	
12.2 Structure and function of mammary gland	2 hrs
12.3 Male reproductive organs	3 hrs
• Structure and function of male reproductive organs	
• Primary and secondary sex characteristics	
• Puberty	
<b>Unit 13: Introductions to Endocrine System</b>	<b>8 hrs</b>
13.1 Structure and function of endocrine glands and its hormones	2 hrs
13.2 Hormone produced by different glands and its functions	2 hrs
13.3 Male and female sex hormones	4 hrs
• Oestrogen	
• Progesterone	
• Testosterone	
• Other hormones	
<b>Unit 14: Introductions to Special Sensory Organ</b>	<b>5 hrs</b>
14.1 Structure and function of the skin	1 hrs
• Sensation	
• Regulation of body temperature:	
• Conduction	
• Convection	
• Radiation	
• Excretion	
• Protection of body structure and immunity	
14.2 Sensory organ: Eye	1 hrs
• Location of the eye	
• Structure and function of the eye	
• Eye accommodation	
• Visual pathway	
14.3 Structure and function of Ear (Adult and Child)	1 hrs
• Location of the ear	
• Structure of the ear	
• Function of the ear	
14.4 Nose and Throat: Structure and function (Review from respiratory system)	1 hrs
14.5 Tongue: Structure and function (review from digestive system)	1 hrs

#### References:

- Wangh and Grant, A, Ross and Wilson. Anatomy and Physiology in Health and Illness 2<sup>nd</sup> ed. (2006): Churchill Livingstone Elsevier.
- Tuitui R, Suwal SN (2018). Human Anatomy and Physiology. Vidharthi Publication, Bhotahity, kathmandu
- Chevalking H, Tuladhar K, Shrestha U. Integrated Science Related to Health, (2005); HLMC, IOM.
- Windood, R.S., Sear's. Anatomy and Physiology for Nurses (1985): English Language Book Society.

# Basic Science Applied to Nursing

Theory: 100 hours

## Course description

This course provides basic knowledge of Bio-chemistry, Microbiology and parasitology. This content prepares the student to understand how to action of drug of the body and its relation among all body system

## Objectives

- Describe the important of Bio-chemistry in health
- Explain the classification, composition function of biomolecules, enzyme
- Analyze blood coagulation mechanism
- Describe the organ function test
- Explain the microbiology world, type, classification of microbiology
- Describe classification cell division growth cycle on the bacteria, virology
- Explain the basic pharmacological concepts
- Explain different terms and terminology of Pharmacology
- Describe antimicrobial agents and anti-neoplastic drugs, their effects, mechanism of action, adverse effects.
- Explain the actions, effects and nursing implication of drugs in different body systems

## Bio-Chemistry (30)

### Unit 1: Introduction 8 hrs

- 1.1 Definition, Scope and importance of Biochemistry in Health science 2 hrs
- 1.2 Types of solution: 2 hrs
  - Normal solution
  - Molar solution,
  - Percentage solution,
- 1.3 Osmosis 2 hrs
- 1.4 Diffusion 2 hrs

### Unit 2: Bio-molecules 8 hrs

- 2.1 Carbohydrate: Definition, Classification, composition, Function, metabolism
- 2.2 Protein: Definition, Classification, Composition, Function, metabolism
- 2.3 Lipid: Definition, Classification, composition, Function, metabolism

### Unit 3: Enzymes 4 hrs

- 3.1 Definition, Classification, Factors affecting enzymatic activity, Co-enzymes, Iso-enzymes  
significance of Enzymes (AST, ALT, CPK, CPK-MB, Amylase, Lipase, ALP, gamma GT, LDH)

### Unit 4: Blood Coagulation mechanism 4 hrs

- 4.1 Coagulation Factors, Intrinsic and Extrinsic pathways

### Unit: 5 Organ Function Test 6 hrs

- 5.1 Liver function test (Bilirubin, AST, ALT, ALP, and gamma GT) 2 hrs

5.2 Renal function tests (Urea, Creatinine, Na +and K+)	2 hrs
5.3 Pancreas function test (Amylase and Lipase)	1 hrs
5.4 Cardiac Profile (Troponin, CPK, CPK-MB, LDH)	1 hrs

## **Microbiology Parasitology/Virology**

**Total Hours: 30**

### **Unit 1: Introduction of Microbiology**

**6 hrs**

#### **1.1 Introduction to microbial world**

2 hrs

- Introduction of Microbiology
- Branches of microbiology
- Definition of medical microbiology
- Types of Microorganisms
- Characteristics of microorganisms

#### 1.2 Classification of microbial diseases

2 hrs

#### 1.3 Microscope

2 hrs

- Introduction of microscope
- Types of microscope
- Handle and care of microscope

### **Unit 2: Parasitology**

**6 hrs**

#### 2.1 Parasites

2 hrs

- Introduction
- Classification and characteristics of human parasite
- Routes of transmission of parasitic infestation

#### 2.2 Introduction of parasitic diseases associated with poor and public hygiene

2 hrs

#### 2.3 Blood parasites (Malaria parasite, Kalazar Microfilaria)

2 hrs

- Life cycle and mode of infection
- Collection of sample, processing and identification
- Treatment, prevention and control

#### 2.4 Intestinal protozoa (Entamoeba histolytica, Giardia lamblia and Cryptosporidia)

2 hrs

- Life cycle and mode of infection
- Collection of sample, procession and identification
- Treatment, prevention and control

#### 2.5 Intestinal Worms (Roundworm, Hook worm, Pinworm, Whipworm, Tapeworm, Echinococcus granulose, H. nana)

2 hrs

- Life cycle and mode of infection
- Collection of sample, processing and identification
- Treatment, prevention and control

<b>Unit 3: Bacteriology</b>	<b>6 hrs</b>
3.1 Bacteria	1 hrs
• Introduction	
• Classification based on shape, arrangement, temperature requirement and oxygen requirement	
• Nutritional requirements of bacteria	
• Bacterial cell anatomy	
• Bacterial division	
• Bacterial growth cycle	
3.2 Culture media	1 hrs
• Composition of media	
• Types of media	
3.3 Staining Techniques	1 hrs
• Introduction	
• Smear preparation	
• Types of staining	
• Gram staining and AFB staining in identifying bacteria	
3.4 Collection and transport of specimen for identification of common bacterial communicable disease	1 hrs
3.5. Normal flora	0.5 hrs
3.6 Concept of opportunistic and pathogenic organisms	0.5 hrs
3.7 Drug Resistance	1 hrs
• Types of drug resistance	
• Mechanism of Drug resistance	
3.8 Antibiotic sensitivity Tests	1 hrs
<b>Unit 4: Virology</b>	<b>4 hrs</b>
4.1 Introduction of Virus	1 hrs
• Characters of virus	
• Morphology of virus	
• Chemical constituent of virus	
4.2 Replication of virus	0.5 hrs
4.3 Classification of medically important virus	0.5 hrs
4.4 Introduction to viral diseases of community concern	1 hrs
4.5 Collection and preservation of viral specimen for laboratory study	0.5 hrs
4.6 Prevention and control of viral diseases	0.5 hrs
<b>Unit 5: Immunology</b>	<b>6 hrs</b>
5.1 Introduction to immunology	1 hrs
5.2 Cells and organs of the immune system	1 hrs
• Primary Lymphoid organs	
• Secondary Lymphoid organs	
5.3 Defense mechanism of the body	1 hrs
• Non specific defense mechanism	
• Specific defense mechanism	

5.4 Antigen and antibody	1 hrs
5.5 Hypersensitivity reaction	1 hrs
5.6 Immunodeficiency disorder	0.5 hrs
5.7 Basic concept of immunology in diagnosis of viral diseases	0.5 hrs

**Unit 6: Mycology** **2 hrs**

6.1 Introduction	1 hrs
6.2 Structure and classification of medically important fungi	1 hrs
• Fungal infections	
• Prevention and control of fungal infection	

**Pharmacology**

**Total Hours: 40**

**Unit 1: Introduction to Pharmacology** **2 hrs**

1.1 Introduction
1.2 Branches of Pharmacology
1.3 Terminology related to pharmacology Pharmaceutical
1.4 Nature and sources of drugs
1.5 Routes of Drug Administration
1.6 Pharmacokinetics
1.7 Pharmacodynamics

**Unit 2: Drug acting on gastrointestinal system** **6 hrs**

• Mechanism of action	
• Indication	
• Doses	
• Contraindication	
• Side effect	
• Nursing management of adverse drugs reactions	
2.1 Antacid: Magnesium hydroxide, magnesium trisilicate, sodium bicarbonate	0.5 hrs
2.2 Ulcer Healing Drugs	1 hrs
• H <sub>2</sub> receptor antagonistic – cimetidine, ranitidine, famotidine and nizatidine	
• Proton pump inhibitors- omeprazole , pantoprazole, lansoprazole, esomeprazole	
• Mucosal Protectant – Sucralfate	
• Anti-H Pylori drugs	
2.3 Anti emetic drug- promethazine, Prochlorperazine, metoclopramide, domperidone, Ondansetron Hydrochloride, Granisetron Hydrochloride	1 hrs
2.4 Anti spasmotic – atropine sulphate, belladonna, dicyclomine, propenthaline bromide, hyocine butyl bromine	1 hrs
2.5 Laxatives and purgatives – bisacodyl, phenolphthalein, castor oil, milk of magnesia, magnesium sulphate, liquid paraffin, Lactulose, Polyethylene Glycol with Electrolytes (PEGLEC), Ispaghula Husk/Isabgol	1 hrs
2.6 Rehydration therapy and anti diarrhoeal – oral rehydration, ringer’s lactate solution	1 hrs
2.7 Anti diarrhoeal - diphenoxylate and atropine, loperamide,	0.5 hrs

**Unit 3: Drug acting on respiratory system****6 hrs**

- Mechanism of action
  - Indication
  - Doses
  - Contraindication
  - Side effect
  - Nursing management of adverse drug reaction
- 3.1 Anti-Asthmatic Drugs: Aminophylline, Theophylline, Ephedrine HCl, Epinephrine (Adrenaline), Isoprenaline Sulphate, Salbutamol, Sodium cromoglycate, Ipratropium Bromide, Corticosteroids 2 hrs
- 3.2 Bronchodilator -Ephedrine, salbutamol, terbutaline, isoprenaline, orchiprenaline, adrenaline, Epinephrine (Adrenaline) 2 hrs
- 3.3 Drugs used in cough 2 hrs
- Pharyngeal demulcents: -menthol, thymol, eucalyptus,
  - Expectorants: - Ammonium Chloride, guaiphenesin, potassium citrate terpin hydrate , potassium iodide
  - Mucolytic agents: - bromhexine, carbocysteine etc.
  - Anti-tussives:- Codeine phosphate, pholcodine, ethylmorphine, noscapine, dextromethorphan
  - Respiratory Stimulants: Doxapram, Nikethamide

**Unit 4: Drug used in cardiovascular system****6 hrs**

- Mechanism of action
  - Indication
  - Doses
  - Contraindication
  - Side effect
  - Nursing management of adverse drug reactions
- 4.1 Drugs used for high blood pressure 2 hrs
- Angiotensin-Converting Enzyme (ACE) Inhibitors: Benazepril, Captopril, Enalapril, Fosinopril, Lisinopril, Moexipril Quinapril, Perindopril, Ramipril
  - Angiotensin II Receptor Antagonists: Candesartan, Losartan, EprosartanTelmisartan, Valsartan
  - Central Acting: Clonidine Guanfacine Methyldopa
  - Alpha Blockers: Peripheral Acting: Doxazosin, Prazosin, Terazosin
  - Vasodilators: Hydralazine Minoxidil
  - Beta-Adrenergic Blockers: Acebutolol Atenolol Bisoprolol Carteolol Esmolol Metoprolol Prapanolol Sotalol Timolol
  - Calcium Channel Blockers: Amlodipine Diltizem Nicardipine Nifidipine Verapamil
  - H)Diuretics
- 4.2 Anti arrhythmic drugs 2 hrs
- A) Class-I (Na<sup>+</sup> Channel blocker)
- Quinidine (IA)
  - Tocainide (IB)
  - Procainamide (IA)
  - Encainamide (IC)
  - Disopyramide (IA)

- Flecainide (IC)
  - Lignocaine (IB)
  - Propafenone (IC)
  - Phenytoin Sodium (IB)
- B) Class– II ( $\beta$  adreno–receptor blocker)
- Propanolol
  - Acebutolol
  - Atenolol
  - Esmolol
  - Labetolol
  - Metoprolol
  - Oxyprenolol
  - Satolol
- C) Class-III
- Amiodarone
  - Ibutilide
  - Dofetilide
  - Sotalol
  - Bretylium
- D) Class IV ( $\text{Ca}^{++}$  channel blocker)
- Verapamil, diltiazem
- E) Others
- Adenosine
  - Isoprenaline.

4.3 Anti anginal drug- 2 hrs

- Nitrate – glyceryl trinitrate (nitroglycerin), Isosorbide dinitrate and isosorbide mononitrate
- B –blockers – Atenolol, metoprolol, propanolol
- Calcium channel blockers – diltiazem, nifedipine, verapamil, nimodipine, amlodipine

4.4 Cardiac glycosides- digoxin, digitoxin

4.5 Drug used in CV shock – dopamine, dobutamine

4.6 Anti coagulants and antagonist – Heparin, warfarin, phytonadione (Vitamin K), Protamine sulphate, Low molecular weight heparin (Delteparin sodium, Enoxaparin sodium, Reviparin Sodium, Tinzaparin sodium)

4.7 Lipid lowering drugs - nicotinic acid, bezafibrate, gemfibrozil, simvastatin, pravastatin, atorvastatin, Cholestyramine, Clofibrate

4.8 Anti platelet drugs: - aspirin, dipyridamole, Abiximab, Eptifibatil, Clopidogrel etc.

4.9 Anti-thrombotic Agent (Thrombolytics/ Fibrinolytic Drugs): Streptokinase, Ertamsylate (Ertamsylate)

#### **Unit 5: Drug used in infection**

**6 hrs**

- Mechanism of action
- Indication
- Doses
- Contraindication
- Side effect

- Nursing management of adverse drug reactions
- Classification of antibiotics
  - Bactericidal: Penicillin, cephalosporins, aminoglycosides (gentamicin, amikacin), rifampicin
  - Bacteriostatic – tetracycline, chloramphenicol, sulphonamides, erythromycin, ethambutol
- Spectrum
  - Broad spectrum:-Tetracycline, ampicillin, ciprofloxacin
  - Narrow spectrum :-Procaine penicillin, benzyl penicillin
- Antibacterial
  - penicillin, cephalosporin, aminoglycosides, macrolides, Fluoroquinolones, sulphonamides, tetracycline, Vancomycin, Carbapenem, Teicoplanin, Imipenem - Cilastatin Sodium, Clindamycin, combination antibiotic (Cilastatin, tazobactam etc)
- Antifungal
- griseofulvin, nystatin, ketoconazole, clotrimazole, miconazole, fluconazole, Amphotericin 'B'
- Antiviral – acyclovir, idoxuridine, ART drugs
- Antiprotozoal – metronidazole, tinidazole, secnidazole, ornidazole
- Anthelmintics- Albendazole, mebendazole, pyrantel pamoate, piperazine, niclosamide
- Anti tubercular drugs:- Isoniazid, rifampicin, pyrazinamide, ethambutol, streptomycin
- Anti leprotic drugs:- Dapsone, clofazimine, rifampicin
- Anti malarial drugs:- chloroquine, quinine, Primaquine, mefloquine, Sulphadoxine + Pyrimethamine
- Antifilarial drugs:- diethylcarbamazine,
- Anti leishmaniasis:- pentamidine, sodium stibogluconate
- Cytotoxic drugs

## Unit 6: Drug acting on the central nervous system

4 hrs

- Mechanism of action
- Indication
- Doses
- Contraindication
- Side effect
- Nursing management adverse of drug reactions
- General Anesthetics
  - Inhalation anesthetics- haloethene, enflurane, ether, nitrous oxide
  - Injectable anesthetics- thiopentone sodium, ketamine, **Propofol, Etomidate**
  - Local anesthetics -lidocaine (lignocaine), bupivacaine and procaine
- Analgesic – morphine, pethidine, codeine phosphate, methadone, pentazocine, buprenorphine, dextropropoxyphen
- Anti inflammatory – aspirin, indomethacin, naproxen, diclofenac, ketorolac, phenylbutazone, ibuprofen, mephenamic acid, piroxicam
- Sedative and hypnotics:- barbiturate (Phenobarbitone),
- Benzodiazepines: Diazepam, Midazolam. Nitrazepam
- Anxiolytics: Alprazolam, Lorazepam, Chlorodiazepoxide, Clonazepam, Midazolam,

- Anti convulsant: Phenytoin, Carbamazepine, Sodium Valproate, Levetiracetam, Gabapentin,
- Anti psychotics:- chlorpromazine, haloperidol, pimozide, Clozapine, Risperidone, Lithium carbonate,
- Opioid Analgesics: Morphine, Pethidine, Propoxyphene Hydrochloride, Codeine Phosphate, Tramadol Hydrochloride,
- Anti depressants:- Amitriptyline, imipramine, nortriptyline, Fluoxetine
- Anti epileptic:- phenytoin, carbamazepine
- Antimanic Drugs: Lithium Carbonate,
- Anti-parkinsonism: Carbidopa and Levodopa

### **Unit 7: Endocrine and hormonal drugs**

**3 hrs**

- Mechanism of action
- Indication
- Doses
- Contraindication
- Side effect
- Nursing management adverse of drug reactions
- Diabetes:- insulin,
  - Short acting:- soluble insulin, prompt insulin, insulin zine suspension
  - Intermediate:- lente, isophane insulin
  - Long acting:-ultralente, protamin zinc insulin
  - Others: Huminsulin, Insulin glargine,
- Oral hypoglycemic:-
  - Sulphonylureas:- Tolbutamide, chlorpropamide, glibenclamide, Glipizide, glimepride, Glyburide
  - Biguanides:- metformin
  - Alpha Glucosidase inhibitors: Acarbose, Miglitot
  - Meglitinides: Nateglinide, Repaglinide
  - Thiazolidiones: Pioglitazone, Rosiglitazone
- Female contraceptive
  - Oral contraceptives-combined pill, sequential pill, phased pill, postcoital pill
  - Injectable contraceptives:- depotmedoxprogesterone acetate
  - Implantable contraceptive:- levonorgestrol
- Uterine stimulants:-oxytocin, ergometrine, misoprostol,
- Corticosteroids:-
  - Mineralo-corticoids:- aldosterone
  - Glucocorticoids :- hydrocortisone, trimcinolone, betamethasone, prednisolone dexamethasone, fluocinolone, clobetasol, flucortisone
- Anti-prolactine Hormone: Bromocriptine Mesylate,
- Antidiuretic Hormone: Vasopressin, Desmopressin, Octreotide acetate,
- Thyroid and anti-thyroid drugs: Thyroid Hormones (Thyroxine), Anti-thyroid Drugs (carbimazol, Propylthiouracil), Lugol's Iodine

### **Unit 8: Drugs acting on Kidney**

**2 hrs**

- Mechanism of action
- Indication
- Doses

- Contraindication
- Side effect
- Nursing management of adverse drug reactions
- Diuretics: Frusemide, Ethacrynic Acid, Hydrochlorothiazide, Spironolactone, Torsemide, mannitol
- Urinary Antiseptics: Nalidixic Acid, Nitrofurantoin, Cotrimoxazole
- Urinary antispasmodic: Flavoxate hydrochloride,

**Unit 8: Drugs acting on lymphatic system**

**2 hrs**

- Mechanism of action
- Indication
- Doses
- Contraindication
- Side effect
- Nursing management of adverse drug reactions
- Highly sedative:-diphennyldramine,. Promethazine
- Moderately sedative:- pheniramine , cyproheptadine , mecolzine
- Mild sedative :- chlorpheniramine, triproline
- Newer histamine:-terfenadine, astemizole, fexofenadine, cetirizine

**Unit 9: Drugs acting on the skin**

**2 hrs**

- Mechanism of action
- Indication
- Doses
- Contraindication
- Side effects
- Nursing management of adverse drug reactions
- Antibacterial:- Bacitracin, silver sulphadiazine, polymyxin, framycetin, neomycin, nitrofurazone, chloramphenical, tetracycline, gentamycin
- Antifungal:- whitefield's ointment, clotrimazole, econazole, ketoconazole, tolnaftate, Zinundecanoate, miconazole etc.
- Antiviral:-
- Acyclovir
- Corticosteroids:- betamethasone, trimcinolone, dexamethasone , clobetasone hydrocortisone, fluocinolone, beclomethasone
- Anti inflammatory:- ibuprofen, piroxicam, diclofenac
- Antiparasitics: - benzyl benzoate, sulphur, crotamiton
- Antipruritis: - calamine lotion
- Antisepticsand disinfectants:- phenol, cresol, chloroxylenol(dettol), potassium permagnate, hydrogen peroxide, iodine, iodophores(povidone iodine) chlorine, chlohexidine, cetrimide, ethanol(alcohol), formaldehyde, gention violet

**Unit 10: Essential drugs, emergency drugs, antidotes,**

**1 Hrs**

- Health post level
- PHC level
- District hospital level

## References

- Suwal, SN, and Tuitui R (2018). Pocket book of drugs Makalu publication house
- Clinical Pharmacology for Nurses"
- K.D Tripathi, Essential Pharmacology, Latest edition
- Satoskar R.S. Bhandarkar S.D., Pharmacology and pharmaco Therapeutics",
- Seth, UK. Problem Oriented Pharmacology and Therapeutics, Kathmandu, Nepal, IOM
- Naveen K. Shrestha, Raj Kumar Thapa & Arun Pandeya, Basic Science Applied to Nursing, Akshav Publication, Kathmandu
- Dr. Satish Kumar Deo, Basics of Clinical Pharmacology, Published by Kabita Dev

# English

**Theory: 120 hours**

## Course Description

This is an integrated general English course, which treats English as a medium for communication and as a means to knowledge and skill related to health. It provides a remedial refresher course including Basic English grammar and structures and use of a dictionary, tools for receiving and imparting information effectively, and exposure to poems, essays and stories which are interesting and informative topics of global interest. This course provides a bridge between secondary and university English.

## Course Objectives

On completion of the course student will be able to:

- Use English for academic and communicative purposes.
- Demonstrate functional, notional and grammatical skill in English language usage.
- Use English structures in informal communication.
- Analyze the prescribed texts related to different literary genres.
- Answer the questions based on the reading texts.
- Produce different types of free compositions

## Contents:

### Part 1: Grammar

#### Unit 1: Link English

**10 hours**

- Dictionary Skills: Alphabetic order, dictionary quarter system, guide words, head words etc.
- British and American English: spelling differences
- Word formation process through affixes (prefix and suffix), vocabulary
- Sentence formation

#### Unit 2: Comparison

**5 hours**

- Comparatives and superlatives forms of Adjectives
- Comparative and superlatives and their uses
- Other ways of comparing things

#### Unit 3: Prepositions

**5 hours**

- Prepositions of Place: on, in, at
- Prepositions of Time: on, in, at
- Prepositions with forms of transport

#### Unit 4: Tenses

**8 hours**

Auxiliary verbs: be, have, do

- The Present Tenses
- The past tenses
- The perfect tense
- Talking about the present tense
- Talking about the past
- Reporting the past
- Talking about the future using 'will' and 'going to'
- Talking about the future using present

<b>Unit 5: Mood</b>	<b>7 hours</b>
Questions	
<ul style="list-style-type: none"> <li>• Wh – words</li> <li>• Question tags- forms</li> <li>• Question tags – uses</li> <li>• Indirect and reported questions</li> <li>• Negative sentence with “not”</li> </ul>	
<b>Unit 6: Modals</b>	<b>7 hours</b>
<ul style="list-style-type: none"> <li>• Instructions to modals</li> <li>• Modal negative and questions</li> <li>• Can/ could, may/ might- possibility</li> <li>• Ought, not to, should, will- probability and certainty.</li> <li>• Can , could , may – permission</li> <li>• Can/could, will/ would – Instructions and requests</li> <li>• Can/could,might, shall - suggestions</li> </ul>	
<b>Unit 7: The Passive</b>	<b>4 hours</b>
<ul style="list-style-type: none"> <li>• The passive voice</li> <li>• “It” as impersonal subject</li> <li>• There’ as impersonal subject</li> </ul>	
<b>Unit 8: Reporting</b>	<b>4 hours</b>
<ul style="list-style-type: none"> <li>• Reporting structures- ‘that clause’</li> <li>• Other report structures</li> </ul>	
<b>Unit 9: Sentence Structures</b>	<b>10 hours</b>
Time clauses	
<ul style="list-style-type: none"> <li>• Conditional clauses using ‘If’</li> <li>• Conditional clauses using modals and ‘unless’</li> <li>• Defining Relative clauses</li> <li>• Non- Defining Relative clauses</li> <li>• Changing the focus of a sentence</li> <li>• Cohesion: Making connection</li> </ul>	
<b>Unit 10: Free writing</b>	<b>7 hours</b>
<ul style="list-style-type: none"> <li>• Paragraph Writing</li> <li>• Essay Writing</li> <li>• Letter Writing</li> <li>• Report Writing (Technical and academic report)</li> <li>• Making Dialogues</li> </ul>	
<b>Unit 11: Comprehension Passage and Terminologies</b>	<b>3 hrs</b>
<ul style="list-style-type: none"> <li>• Passages related to Medical Issues</li> <li>• Common Medical Terminologies</li> </ul>	

## Part: 2 Extensive reading (Literature)

<b>Unit 1: Poems</b> My Heart Leaps Up When I Behold, William Wordsworth The Poplar Field, William Cowper Keeping Things Whole, Mark Strand On the Vanity of Earthly Greatness, Arthur	<b>12 hours (4*3)</b>
<b>Unit 2: Supernatural Stories</b> The Recurring Dream The Lost Doll The House Call The Loving Mother	<b>12 hours (4*3)</b>
<b>Unit 3: Stories</b> A Worn Path, Eudora Welty The Gardener	<b>6 hours (2*3)</b>
<b>Unit 4: Essays</b> Speaking of Children, Barbara Holland The Nightmare Life Without Fuel, Isaac Asimov Ooops! Hows' That Again, Roger Rosen Blatt The Six Million Dollar Man, Harold J. Morowitz	<b>16 hours (4*4)</b>
<b>Unit 5: Drama/Play</b> Malini, Rabindra Nath Tagore	<b>4 hours</b>

### ***Recommended texts***

1. *Link English*, Sajhaprakashan,
2. *The Magic of Words* (collection of poetry, essays, prose)
3. W. Dave (2011), *Students Grammar, the University of Brigham, London; Harper Collins Publishers.*

### **Evaluation Scheme:**

This paper carries 100 (20 internal + 80 final) marks. The final assessment 80 marks will be divided as follows;

- Magic of Words: 25 Marks
- Link English: 10 Marks
- Student Grammar: 20 Marks
- Free Writing : 15 Marks
- Passage : 10 Marks

# नेपाली

वर्ष : प्रथम  
तह : प्रमाणपत्र

पाठघण्टा: १२०  
मूल्यांकन अंक: १००  
आन्तरिक मूल्यांकन: २०  
अन्तिम मूल्यांकन: ८०

यो पाठ्यांश प्रवीणता प्रमाणपत्र तहमा अध्ययन गर्ने विद्यार्थीहरूका लागि नेपाली भाषाको व्याकरणात्मक ज्ञान र सुझको विकासका साथै पठनबोध र अभिव्यक्ति क्षमताको विकास गर्ने दृष्टिले राखिएको हो । यसलाई मुख्यतः दुई खण्डमा बाडिएको छ: व्याकरण खण्ड र बोध (अभिव्यक्ति) खण्ड । व्याकरण अन्तर्गत वर्ण, वर्णविन्यास, शब्दवर्ग, रूपायन, शब्द निर्माण र वाक्यसम्बन्धी पाठ्यवस्तुहरू राखिएका छन् भने बोध-अभिव्यक्ति अन्तर्गत सामान्य बोध र प्रयोजनपरक बोधका साथै अभिव्यक्ति रचनाका लागि अपेक्षित सीपहरू र समीक्षाका लागि साहित्यिक विधाका पाठहरू समाविष्ट छन् ।

## पाठ्यांशको उद्देश्य:

यो पाठ्यांश पूरा गरेपछि विद्यार्थीहरू निम्नलिखित कुरामा सक्षम हुनेछन् :

१. कथ्यभाषा र लेख्यभाषाका बीचको भिन्नता पहिल्याउन ।
२. अभिव्यक्तिमा प्रयोग हुने शब्दहरूको उपयुक्त वर्णविन्यास लेख्न ।
३. शब्दहरूका स्रोत, बनोट र वर्ग-पहिचान गर्न, रूपायन गर्न र निर्माण गर्न ।
४. वाक्यतत्व र वाक्यान्तरणका कडीहरू बुझेर आफ्ना अभिव्यक्तिमा तिनको उपयुक्त प्रयोग गर्न ।
५. खास वाक्यतत्वसंग सम्बद्ध ढाँचा र सन्दर्भका आधारमा अनुच्छेद रचना गर्न ।
६. स्तर अनुरूप पाठ्यसामग्रीमा प्रयुक्त शब्दहरूका आधारमा शब्दभण्डारको विस्तार गर्न ।
७. बोध र संक्षेपीकरणका पाठ्यसामग्रीमा प्रयुक्त शब्दहरूका आधारमा शब्दभण्डारको विस्तार गर्न ।
८. ज्ञान-विज्ञानका विभिन्न शीर्षकहरूमा स्वतन्त्र रूपमा अनुच्छेद र निबन्ध रचना गर्न ।
९. तोकिएका आधारमा साहित्यिक कृतिहरूको समीक्षा गर्न ।

## खण्ड १: नेपाली व्याकरण

पाठघण्टा : ६०

पूर्णाङ्क : ५०

एकाइ	पाठ्य विषयको विवरण	पाठघण्टा	अङ्क
१.	<b>वर्ण र वर्णविन्यास :</b> (क) <u>उच्चार्य वर्णहरूको परिचय :</u> <ul style="list-style-type: none"> <li>• स्वर र व्यञ्जन वर्णहरू</li> <li>• देवनागरी लिपि र उच्चार्य नेपाली वर्णहरू</li> <li>• नेपाली अक्षरहरूको संरचना, अक्षरीकरण र अक्षरसंख्या निर्धारण</li> </ul> (ख) वर्ण विन्यास : <ul style="list-style-type: none"> <li>• कथ्य र लेख्य नेपाली भाषामा भिन्नता</li> <li>• ह्रस्व-दीर्घ (इ, उ), स/श/ष, ब/व, व/ओ, य/ए, ऋ/रि, क्ष/छे, क्ष्य/छ्य, शिरविन्दु र चन्द्रविन्दु, हलन्त, पदयोग र पदवियोग तथा लेख्य चिन्ह सम्बन्धी अशुद्धि संशोधन अभ्यास</li> </ul>	६ ४	८
२.	<b>शब्दभण्डार:</b> <b>शब्दवर्ग, शब्दरूपायन र शब्दनिर्माण</b> <ul style="list-style-type: none"> <li>• स्रोतका आधारमा शब्दहरूको परिचय, पहिचान र प्रकार</li> <li>• व्युत्पादनका आधारमा शब्दहरूको परिचय, पहिचान र प्रकार</li> <li>• शब्दवर्ग-नाम, सर्वनाम विशेषण, क्रियापद, नामयोगी, क्रियायोगी,</li> </ul>	१९	१२

३.	<p>संयोजक, विस्मयादिवोधक र निपातहरूको पहिचान- अभ्यास</p> <ul style="list-style-type: none"> <li>• शब्दरूपायन-नाम, सर्वनाम र विशेषणको लिङ्ग, वचन, आदर, कारकका आधारमा तथा क्रियापदको लिङ्ग, वचन, पुरुष, आदर, काल, पक्ष, भाव, वाच्य र अकरणका आधारमा शब्द रूपायनको अभ्यास ।</li> <li>• शब्द निर्माण अभ्यास</li> <li>• निम्नलिखित उपसर्गहरूको शब्दनिर्माणको अभ्यास प्र, अप, सम्, अनु, वि, अधि, उत्, प्रति, परि, उप, सु, नि, निर, दुर, अ, अन, कु ।</li> <li>• निम्नलिखित कृत् प्रत्ययको शब्दनिर्माणको अभ्यास : आइ, ओट, ओ, आउ, आहा, अक्कड, उवा, इलो । अक, अन ई इत, य, तव्य ।</li> <li>• निम्नलिखित तद्धित प्रत्ययको शब्दनिर्माणको अभ्यास : आइ, आली, इया, इलो, ई, ए, एली, ली, ले । इक, ई, ईय, इत, ता, त्व, मान, वान, आलु ।</li> <li>• समस्त शब्दको पहिचान र तत्पुष, कर्मधारण, िगु, िफु अव्ययीभाव, र वह्व्रीहिको प्रक्रियाबाट समस्त शब्दको निर्माण गर्ने अभ्यास</li> </ul> <p><b>वाक्यतत्त्व, वाक्यान्तरण</b></p> <p>(क) वाक्यतत्त्व: उद्देश्य र विधेयको पहिचान</p> <ul style="list-style-type: none"> <li>• क्रिया र यसका प्रकार</li> <li>• वाक्यका प्रकार: सरल र जटिल वाक्यको पहिचान</li> <li>• वाक्य संश्लेषण र विश्लेषण</li> <li>• लि, वचन, पुष र आदरका आधारमा कर्ता र क्रियापदका बीचको सति सम्बन्धी अभ्यास</li> <li>• विशेष्य र विशेषण र नाम र सर्वनामको बीचको सति सम्बन्धी अभ्यास</li> <li>• विभक्तिनियम तथा ले, लाई, देखि, बाट, को, का, की, रो, रा, री, नो, ना, नी, मा आदि विभक्ति प्रयोगको अभ्यास</li> <li>• सरल र तिर्यक् विभक्ति नियमको अभ्यास</li> </ul> <p>(ख) वाक्यान्तरण :</p> <ul style="list-style-type: none"> <li>• विभिन्न काल, पक्ष, भाव, अकरण, वाच्य, प्रेरणार्थक, उक्ति आदिमा वाक्यान्तरण गर्ने अभ्यास</li> </ul>	१९	२०
		१०	१०

### खण्ड ख: बोध तथा अभिव्यक्ति

पाठघण्टा : ६०

पूर्णाङ्क : ५०

एकाइ	पाठ्य विषयको विवरण	पाठघण्टा	अङ्क
१.	<p><b>बोध र शब्दभण्डार</b></p> <p>चिकित्सा विज्ञानसम्बन्धि गद्यांशहरूको बोध र शब्दभण्डारको अभ्यास</p> <p>चिकित्सा, शल्य चिकित्सा तथा स्वास्थ्य विज्ञानसम्बन्धी प्राविधिक शब्दहरूको ज्ञान अभ्यास (अर्थ लेख्ने र अर्थ खूल्ने गरी वाक्यमा प्रयोग गर्ने)</p> <p>इन्द्रलुप्त, उत्कलेस, ज्वर, पाण्डुरोग, प्रमेह, मधुमेह, पित्तदोस, प्रदर (१.</p>	१२	१२

	<p>रक्तपदर, २. स्वेतप्रदर) क्षयरोग, नशच्छेदन, रक्तचाप, उच्च रक्तचाप, न्यून रक्तचाप, गर्भपातपतन, हृदयरोग, पाचनक्रिया, पित्तविकार, रक्तविकार, चिकित्सा, निदान, परिचारिका, प्रसववेदना, प्रसुति, औषधालय, चिरफार, बहिरंग, हिक्का, हरिताल पार्नु, हरिनाश, हियो उठनु, वातज्वर, सिफर पलिटनु, सिङ्गारू, सेपाउनु, सप्को गर्नु, सन्निपात, सभिपात, शल्य चिकित्सा, शूल, शल्योपचार, मासु फरफराउनु, माथा विग्रनु, माटे, माई, भूंग्रेज्वरो, बेर्नु निस्कनु, बालतोड, बाथ, बान लाग्नु, बाउडिनु, बहलागनु, बमन, विरेचन, फुस्रिनु, फुलो पर्नु, फाकफुक, पौठा बस्नु, पेट बटारिनु, पेट काटनु, पेट पोल्नु, पिनाश, पाछुनु, निसलोठ, धम्की, दोख, दमै खटिरो, दम, डकार्नु, ठेउला, भूसिलो डकार आउनु, भिजो मान्नु, भाडा, जिरिङ्ग गर्नु, जल गडा, जने खटिरा, जगाउनु, छोप्नु, छेर्नु, चिलचिलाउनु, चिप्रा बस्नु, चस्का पर्नु, घमौरा, गला लाग्नु, गलगण्ड, गलफुलो (हांडे), गोला चलनु, गानो चलनु, खरापानी लाग्नु, कण्डु, कुण्ठ, कोर, कोख, कैठिनु, कुंजो, कांसो लाग्नु, कास, काम्नु, कामज्वर, कांडो, कांध लाग्नु, काई लाग्नु, कब्जियत, औसनी लाग्नु, औडाहा चलनु, ओछ्यान पर्नु, ओखत मुलो, ओइलाउनु, ऐठन, उभर्को लाग्नु, उदररोग, उपर्तली, उकुच पलटनु, अर्बुद, अजीर्ण, अपस्मार, आन्द्रा बटार्नु, आंत, आंठी गांठी, आंठे, आड् चलनु, आक्तो, आउं, अरूची, अम्मल, अमल पित्त, अमन हुनु, अग्नी जागनु, अतिसार, अंधो खटिरा, स्वेदन ।</p>		
२	<p><b>संक्षेपीकरण :</b></p> <ul style="list-style-type: none"> <li>• बुंदा टिपोट तथा संक्षेपीकरण गर्ने अभ्यास</li> <li>• अनुच्छेद, पत्र, निवेदन, विज्ञापन र प्रतिवेदन लेखन</li> <li>• ज्ञान विज्ञान र प्रविधिसंग सम्बन्धित विभिन्न विषय शीर्षकहरूमा अनुच्छेद लेख्ने अभ्यास</li> </ul>	४	४
३	<p><b>निबन्ध लेखन :</b></p> <ul style="list-style-type: none"> <li>• निबन्ध योजना र सोसंग सम्बन्धित बुंदा अनुरूप अनुच्छेद गठनको अभ्यास</li> <li>• वस्तुपरक र भावपरक निबन्ध लेखनको अभ्यास</li> </ul>	१०	८
४	<p><b>कृति समीक्षा :</b></p> <p>विषयवस्तु, कथानक, पात्र, परिवेश, सन्देश, शीर्षक र भाषा शैलीका आधारमा निम्नलिखित रचनाहरूको समीक्षात्मक अभ्यास:</p> <p>कथा :</p> <ul style="list-style-type: none"> <li>• गुरू प्रसाद मैनाली छिमेकी</li> <li>• विश्वेश्वरप्रसाद कोइराला सिपाही</li> <li>• इन्द्रबहादुर राई रातभरि हुरी चल्यो</li> </ul>	३४	२६

<ul style="list-style-type: none"> <li>रमेश विकल</li> </ul>	मधुमालतीको कथा		
निवन्ध :			
<ul style="list-style-type: none"> <li>लक्ष्मी प्रसाद देवकोटा</li> <li>शंकर लामिछाने</li> <li>भैरव अर्याल</li> </ul>	<p>पहाडी जीवन</p> <p>एक पत्र सम्पादकलाई</p> <p>महापुरूषको संगत</p>		
कविता :			
<ul style="list-style-type: none"> <li>लेखनाथ पौडेल</li> <li>पारिजात</li> <li>गोपाल प्रसाद रिमाल</li> <li>माधव प्रसाद घिमिरे</li> </ul>	<p>नैतिक दृष्टान्त</p> <p>मानूषी</p> <p>आमाको सपना</p> <p>नेपालै नरहे</p>		
नाटक :			
<ul style="list-style-type: none"> <li>विजय मल्ल</li> </ul>	बहुला काजीको सपना		

द्रष्टव्य :

२० प्रतिशत अङ्क आन्तरिक मूल्याङ्कनका लागि छुट्टाइएको छ भने ८० प्रतिशत अङ्क अन्तिम मूल्याङ्कनका लागि छुट्टाइएको छ।

**सहायक पुस्तकहरू (सम्बद्ध अंश मात्र):**

- मोहनराज शर्मा, शब्द रचना र वर्ण-विन्यास वाक्यतत्त्व र अभिव्यक्ति, काठमाण्डौ बुक सेन्टर, काठमाण्डौ
- चित्र कुमार गुरुङ्ग एम्.एस्सी.र केदार न्यौपाने एम्.ए., प्राविधिक शब्दार्थावली (चिकित्सा तथा विज्ञान खण्ड), त्रिभुवन विश्वविद्यालय, चिकित्सा शास्त्र अध्ययन संस्थान, अनुसन्धान शाखा, महाराजगंज, काठमाण्डौ ।
- त्रि.वि. पाठ्यक्रम विकास केन्द्र, अनिवार्य नेपाली शिक्षण निर्देशन, काठमाण्डौ
- सागरमणि पाण्डेय, ईश्वरी पाण्डेय, अनिवार्य नेपाली, रत्नसागर प्रा.लि., काठमाण्डौ
- टीकाहरि बराल र अन्य, सीटीइभीटी अनिवार्य नेपाली ।

# Second Year

## Master Plan for 2<sup>nd</sup> year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Study Block										Vacation		Medical and Surgical Nursing I and II															

29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Medical and Surgical Nursing I and II	Geriatric Nursing	Mental Health/Psychiatric Nursing	Community Health Nursing II										Vacation			Study Block			Revision	Final Exam			

S.N.	Subject	Weeks	Shift	Hours	Weeks Distribution
1.	Medical and Surgical Nursing I	12	Morning (6 weeks x 5 days x 7 hrs) Evening (4 weeks x 5 days x 7 hrs) Night (2 weeks x 4 x 12 hrs)	210 140 96	Study Block= 13 weeks Clinical Field=29 weeks Vacation=6 weeks Revision=1 weeks Final exam=3 weeks
2.	Medical and Surgical Nursing II	5	OT=3 weeks x 5 days x 7 hrs ENT=2 weeks x 5 days x 7 hrs	105 70	
4.	Geriatric Nursing	2	2 week x 5 days x 7 hour	70	
5.	Mental Health/Psychiatric Nursing	2	2 weeks x 5 days x 7 hrs	70	
6.	Community Health Nursing	8	8 weeks x 5 days x 6 hrs	240	

# Medical and Surgical Nursing I

**Theory: 150 hours**

## Course Description

This course is designed to develop knowledge skill attitude among students to provide nursing care to individual having disorders of different body system: musculoskeletal, respiratory, cardiovascular and hematological, gastrointestinal, urinary, neurological, integumentary, endocrinal including oncology. It provides students an opportunity to apply the nursing process in the care of adult patients with common medical- surgical conditions in a variety of health care settings.

## Objectives

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

- State the developmental task of young adult and middle age group.
- Explain the physiological and emotional responses of the body to stress and crisis
- Explain the common health problem (disorders) of different body systems of adult patients
- Explain the nursing management of patients having different body system disorders
- Describe the special nursing care of patients related to different body system disorders
- Describe nursing care of patients having different diagnostic procedures
- Explain the communication and information used in patient care?

## Content

<b>Unit 1: Introduction to nursing care of adults disorders</b>	<b>2 hrs</b>
1.1 Developmental needs and tasks of: <ul style="list-style-type: none"><li>• Young adult</li><li>• Middle aged adult</li></ul>	1 hrs
1.2 Common health problems of adults: <ul style="list-style-type: none"><li>• Young adults</li><li>• Middle aged adult</li></ul>	1 hrs
<b>Unit 2: Stress and crisis</b>	<b>6 hrs</b>
2.1 Definition of stress and crisis	1 hrs
2.2 Body's response to stress and crisis <ul style="list-style-type: none"><li>• General adaptation syndrome</li><li>• Alarm reaction</li><li>• Stage of resistance</li><li>• Stage of exhaustion</li></ul>	2 hrs
2.3 Phase of crisis <ul style="list-style-type: none"><li>• Shock, defensive retreat</li><li>• Recoil or acknowledgement</li><li>• Adaptation and change</li></ul>	2 hrs

2.4 Ways of helping the individuals and families in stress and crisis	1hrs
<b>Unit 3: Rehabilitation</b>	<b>6 hrs</b>
3.1 Introduction	1hrs
Concept/definition: disability and rehabilitation	
3.2 Type of disability	1hrs
• Primary disability	
• Secondary disability	
• Progressive	
3.3 Goals of rehabilitation	1hrs
• To restore potential functions	
• To maximize existing capabilities	
• To prevent deterioration	
3.4 Rehabilitation services	2hrs
• Social service	
• Physical therapy	
• Occupational therapy	
• Speech therapy	
• Nursing therapy	
• Medical therapy	
• Orthotics and prosthetics	
• Psychotherapy	
• Volunteer service	
• Others	
3.5 Nurse's role in rehabilitation process:	1hrs
• Providing support	
• Maintaining self –esteem of the individual	
• Preventing secondary disabilities	
• Evaluating patients progress	
<b>Unit 4: Nursing care of patients with respiratory disorders</b>	<b>12 hrs</b>
4.1 Review of anatomy and physiology of respiratory system.	1hrs
4.2 Etiology, pathophysiology, signs and symptoms, investigation, treatment, nursing management of patient with following disorders:	5hrs
4.2.1 Disorders of pleura and pleural spaces	
• Pleurisy , thoracic empyema, Hemothorax , pneumothorax, pleural effusion, Bronchopleural fistula	
4.2.2 Disorders the trachea, bronchial tree and lungs	
Atelectasis , influenza ,bronchitis, Bronchiectasis , lung abscess, lung tumor, pneumonia , Pulmonary Tuberculosis, Chronic obstructive pulmonary disease (COPD), bronchial asthma, Pulmonary emphysema , pulmonary embolism , Chest injury,	

4.3 Diagnostic investigations: Introduction, Preparation and nursing care	3hrs
<ul style="list-style-type: none"> <li>• Radiological examination</li> <li>• Sputum test</li> <li>• Blood test</li> <li>• Bronchoscopy</li> <li>• Thoracocentesis</li> <li>• Branchogram,</li> <li>• Pulmonary function test</li> <li>• Pulse oximetry</li> </ul>	
4.4 Special nursing care of patient with:	2hrs
<ul style="list-style-type: none"> <li>• Oxygen therapy</li> <li>• Water seal drainage</li> <li>• Tracheotomy</li> <li>• Postural drainage</li> </ul>	
4.5 Drug used for the disorder of respiratory system (Review)	1hrs
<b>Unit 5: Nursing care of patients with Gastrointestinal disorders</b>	<b>12 hrs</b>
5.1 Review anatomy and physiology of the gastrointestinal system	1 hrs
5.2 Etiology, pathophysiology, signs and symptoms, investigation, treatment, nursing management of patient following disorders:	4 hrs
<ul style="list-style-type: none"> <li>• Upper gastrointestinal tract Disorders :Esophageal inflammation and stricture, gastro esophageal reflux disease, peptic ulcer , pyloric stenosis, hernia (hiatus , inguinal)</li> <li>• Lower gastrointestinal tract Disorders: Appendicitis , intestinal</li> <li>• Infective/Inflammatory GI diseases: Tuberculosis of the abdomen, peritonitis, Chron's disease, ulcerative colitisRectum and anal disorders: Hemorrhoids , fistula and fissure in ano, tumors</li> <li>• Related organs gastrointestinal disorders: Hepatitis, hepatic coma, Cirrhosis of liver, liver abscess. Liver failure, Cholecystitis, cholelithiasis, choledocholithiasis, Pancreatitis, tumour</li> </ul>	
5.3 Diagnostic investigations: Introduction, Preparation and nursing care	3 hrs
<ul style="list-style-type: none"> <li>• Radiological examination: X-ray, CT scanning, MRI , Barium meal barium enema Cholangiogram, oral cholecystogram, endoscopy, ERCP, Endoscopic Ultrasonography</li> <li>• Blood test: Liver function test, bilirubin</li> <li>• Other tests:Gastroscopy, gastric analysis ,Aspiration and liver biopsy,Abdominoparacentesis</li> </ul>	
5.4. Specific nursing care of patients with following procedures	3 hrs
<ul style="list-style-type: none"> <li>• Meeting the nutritional need by nasogastric tube feeding, jejunostomy feeding, insertion and care of nasogastric tube,</li> <li>• Total parenteral nutrition (TPN),</li> <li>• Therapeutic diets</li> <li>• Colostomy care and feeding including meeting psychological need of the individual</li> </ul>	
5.5 Drugs used in gastrointestinal system and their nursing implications	1 hrs

<b>Unit 6: Nursing care of patients with the musculo-skeletal disorders</b>	<b>15 hrs</b>
6.1 Etiology, path physiology, signs and symptoms, investigation, treatment, nursing management of patient with following disorders	5 hrs
<ul style="list-style-type: none"> <li>• Injuries: soft tissue injury, dislocation, fracture</li> <li>• Inflammation / infection – Arthritis (rheumatoid and pyogenic) osteomyelitis , osteoarthritis/gout</li> <li>• Osteoporosis and osteomalacia</li> <li>• Bone tumor and muscle tumor</li> <li>• Other musculoskeletal disorders</li> </ul>	
6.2 Diagnostic investigations: Introduction, Preparations and nursing management	2 hrs
<ul style="list-style-type: none"> <li>• x-ray, arthroscopy, biopsy (aspiration of fluid and bone marrow)</li> </ul>	
6.3 Specific nursing care of patients with following procedures	5 hrs
<ul style="list-style-type: none"> <li>• Closed and open reduction</li> <li>• Amputation</li> <li>• Immobility problem: pressure sore, respiratory complication, urinary stasis, calculi, contracture /deformities and cardiovascular problems</li> <li>• Prevention of immobility proper positioning and turning <ul style="list-style-type: none"> <li>• deep breathing exercises</li> <li>• rang of the motion</li> </ul> </li> <li>• Used of special orthopedic equipment <ul style="list-style-type: none"> <li>• Bed and frames, traction</li> <li>• Splints , plaster ,, cradles</li> <li>• Sand bag, crutch, walker, bars</li> </ul> </li> </ul>	
6.4 Drugs used in musculo-skeletal system their nursing implications	2 hrs
<b>Unit 7: Nursing care of the patients with cardiovascular and hematologic disorders</b>	<b>15 hrs</b>
7.1 Anatomy and physiology of the cardiovascular and hematologic systems	2 hrs
7.2 Etiology, pathophysiology, signs and symptoms, investigation, treatment, nursing management of patient with following disorders	5 hrs
<ul style="list-style-type: none"> <li>• Cardiac disorder <ul style="list-style-type: none"> <li>- Coronary artery disease : Atherosclerosis, angina pectoris, myocardial infarction,</li> <li>- Valvular disorder:- steno sis and incompetency of vulvas’</li> <li>- Cardiomyopathy :- heart failure , cardiac arrest</li> <li>- Inflammatory cardiac disorder :- rheumatic hearts disease , infective endocardiac, myocarditis , pericarditis</li> <li>- Bone tumor and muscle tumor</li> <li>- Cardiac rhythm disorder:- arrhythmia</li> </ul> </li> <li>• Vascular disorder <ul style="list-style-type: none"> <li>- Hypertension, arteriosclerosis, cerebrovascular accident, thrombophlebitis, thrombosis, embolism, aneurysm, varicose vein, gangrene,</li> <li>- Blood disorder :- anemia, leukemia, lymphoma (Hodgkin’s and non hodgkins disease), hemophphilia, purpura ,agranulocytosis</li> </ul> </li> </ul>	
7.3 Diagnostic investigations: Introduction, Preparations and nursing management	4hrs
<ul style="list-style-type: none"> <li>• Electrocardiogram(ECG), angiogram, Tread Mill Test(TMT), holter monitoring</li> <li>• Arterial blood gas analysis , blood analysis including cardiac enzyme</li> <li>• Bone marrow aspiration</li> </ul>	

- 7.4 Specific nursing care with following procedures 4hrs
- Blood transfusion
  - Cardiopulmonary resuscitation
  - Cardiac Pacing
  - Cardiac catheterization

- 7.5 Drugs used in following cardiovascular conditions and their nursing implications 2 hrs
- Cardiac failure
  - Cardiac arrhythmia
  - Hypertension
  - Coronary Artery Diseases
  - Coagulation disorders

**Unit 8: Nursing care of patients with fluid, electrolyte, urinary and renal system disorders 15 Hrs**

- 8.1 Anatomy and physiology of the urinary renal system 1 hrs
- 8.2 Etiology, pathophysiology, signs and symptoms, investigation, treatment, nursing management of patient with following disorders 6 hrs
- 8.2.1 Fluid, electrolyte and acid base balance
- Disturbances of chemical balance (homeostasis) change in volume and composition of body fluid
  - Dehydration/Over hydration
  - Sodium, potassium, calcium and phosphorus imbalance
- 8.2.2 Acid base balance
- Changes in PH of body fluid
  - Shock, acidosis, alkalosis
- 8.2.3 Ureter, bladder, and urethral disorder
- Urinary tract infection, bladder injury, bladder stone
  - Benign prostate hyperplasia, tumor
- 8.2.4 Kidney disorder
- Acute kidney injury (AKI)
  - Chronic kidney disease (CKD)
  - Pyeloneohritis, glomerulonephratis
  - Hydronephrosis, nephritic syndrome
  - Renal calculus, renal neoplasm
- 8.3 Diagnostic investigations:Introduction, Preparations and nursing management 3hrs
- Intravenous pyelogram,
  - Renal function test, urinalysis
  - X-ray, KUB
  - Cystoscopy, retrograde pyelography
  - Renal Biopsy.
- 8.4 Specific nursing care with following procedures 3hrs
- Fluid replacement
    - Type of solution used
    - Intravenous therapy

<ul style="list-style-type: none"> <li>• Dialysis: Haemo/ peritoneal dialysis,</li> <li>• Bladder irrigations</li> <li>• Renal transplantation</li> </ul>	
8.5 Drugs used in urinary system and their nursing implications	2 hrs
<b>Unit 9: Nervous systems</b>	<b>15 hrs</b>
9.1 Anatomy and physiology of the nervous systems	1 hrs
9.2 Etiology, path physiology, signs and symptoms, investigation, treatment, nursing management of patient following disorders	6 hrs
9.2.1 Accidents/ injuries <ul style="list-style-type: none"> <li>• Head injuries, spinal cord injuries</li> <li>• Rupture of intravertebral disc</li> </ul>	
9.2.2. Inflammation and infection <ul style="list-style-type: none"> <li>• Meningitis (viral, pyogenic, tuberculosis) and encephalitis</li> <li>• Polyneuritis and trigeminal neuralgia</li> <li>• Poliomyelitis and tetanus</li> </ul>	
9.2.3 Other nervous system disease <ul style="list-style-type: none"> <li>• Parkinson's disease</li> <li>• Epilepsy</li> <li>• Brain tumor</li> </ul>	
9.3 Diagnostic investigations: Introduction, Preparations and nursing management <ul style="list-style-type: none"> <li>• Myelogram and lumbar puncture</li> <li>• Electro encephalogram (EEG)</li> <li>• CT scan and MRI</li> </ul>	3 hrs
9.4 Specific nursing care of patient with following conditions <ul style="list-style-type: none"> <li>• Paralysis</li> <li>• Unconsciousness</li> <li>• Seizure disorder</li> </ul>	3 hrs
9.5 Drugs used in nervous system and their nursing implications	2 hrs
<b>Unit 10: nursing care of the patients with skin disorders</b>	<b>12 hrs</b>
10.1 Anatomy and physiology of the skin	1 hrs
10.2 Etiology, path physiology, signs and symptoms, investigation, treatment, nursing management of patient following disorders	5 hrs
10.3 Inflammatory disorders <ul style="list-style-type: none"> <li>• Acne vulgaris, herpes simplex and, dermatitis impetigo</li> <li>• Eczema psoriasis leprosy</li> <li>• Scabies</li> </ul>	
10.4 Injuries of the skin <ul style="list-style-type: none"> <li>• Burns, gas gangrene,</li> </ul>	
10.5 Neoplasm of skin <ul style="list-style-type: none"> <li>• Basal cell carcinoma</li> <li>• Melanoma</li> </ul>	
10.6 Special nursing care of patient with burn	3 hrs
10.7 Drugs used in skin and their nursing implications	3 hrs

<b>Unit 11: Nursing care of patient with endocrine disorder</b>	<b>10 hrs</b>
11.1 Review of anatomy and physiology of the endocrine system	1 hrs
11.2 Etiology, path physiology, signs and symptoms, investigation, treatment, nursing management of patient following disorders	3 hrs
11.2.1 Thyroid disorders	
• Hyper and hypothyroidism	
• parathyroidism	
11.2.2 Pituitary disorders	
• Hypopituitarism (dwarfism)	
• Hyperpituitarism (acromegaly and gigantism)	
Diabetes Insipidus	
11.2.3 Adrenal disorders	
• Hypo function (Addison's disease)	
• Hyper function (Cushing's syndrome)	
11.2.4 Pancreatic disorders (diabetes mellitus)	
11.3 Diagnostic investigations: Introduction, preparations and nursing management	3 hrs
• Glucose tolerance test (GTT)	
• Blood analysis T3, T4, TSH	
• Blood sugar fasting, blood sugar random, blood sugar PP	
• HbA1C	
• Basal metabolic rate	
• Urinalysis	
• Thyroid scan	
11.4 Specific care of patients with following procedures	3 hrs
• Insulin therapy	
• cortisone therapy	
<b>Unit 12: Communicable disease</b>	<b>5 hrs</b>
12.1 Care of patient with communicable disease	
12.2 Review the concept of communicable disease from CHNI AND C HN II	
12.3 Etiology, path physiology, signs and symptoms, investigation, treatment, nursing management of patient with malaria, dengue fever, kalazar, typhoid, paratyphoid and cholera, chickenpox, measles, rubella, influenza, leishmaniasis, hepatitis a, b, and c, lymphatic, filariasis, encephalitis, viral meningitis, bacterial meningitis, HIV, Dengue fever, rabies, brucellosis	
<b>Unit: 13 Oncology nursing</b>	<b>25 hrs</b>
13.1 Terminologies: oncology, cancer, tumor, carcinogenic	1 hrs
13.2 Oncological disorders	4hrs
• Risk factors	
• Warning sign	
• Etiology,	
• Types	
• Primary, secondary and tertiary prevention and control	

- 13.2 Diagnostic investigations: Introduction, preparations and nursing management 4hrs
- Biopsy (histopathology)
  - X-ray
  - Pap smear/VIA, VILI
  - Mammogram/BSE (Breast Self-Examination)
- 13.3 Cancer treatment modalities and nursing management 4hrs
- Chemotherapy
  - Radiotherapy
  - Immunotherapy
  - Hormonal therapy
  - Surgery
  - Rehabilitation
- 13.4 Palliative care 6hrs
- Introduction/definition
  - Pain management
    - Definition pain
    - Type of pain
  - Nursing management in pain relief
    - Pharmacologic pain management (WHO Ladder)
    - Non Pharmacologic pain management
- 13.5 Psychosocial aspects of terminally ill patient 4hrs
- Patient
  - Family
- 13.6 Grieve and bereavement 4hrs
- 13.7 End of life care 4hrs
- Introduction of end of life care
  - Signs and symptoms
  - Care and management of patient at the end stage of life including last 48 hours
  - End of life care - hospice
  - Ethical issues in end stage life care.

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# Medical and Surgical Nursing I (Practical)

**Total Hours: 446 (12 weeks)**

## Course Description

This course provides opportunity for students to apply knowledge Medical and Surgical Nursing I (theory) to the clinical situation. The student will use the nursing process in the care of patient with the medical, surgical and oncological unit of the hospital.

## Course Objectives

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

- Use the nursing process in giving comprehensive care to the adult patients with medical and surgical problem.
- Apply knowledge from the physical and social science in planning and implementing the care of physically and mentally ill patients.
- Teach and counsel individual and family for self care.
- Provide preoperative, intraoperative, and postoperative nursing care for patients undergoing surgery.

## Activities

### Nursing care of adult patients

- Each student is assigned medical and surgical units will assess the patients for present and potential problem prioritize problem for according to the patients needs and condition, write goals and nursing actions to meet these problems, implement her plan of care and evaluate the outcome of care.
- Each student will master those procedures as per requirement of the second year nursing programs and maintain a checklist of all the procedures supervised and passed by the responsible faculty of the unit.
- Students end pre and post- conferences held by the concerned teachers at the clinical area to enhance student's learning.

### Nursing care of patients with orthopedic and neurological disorders:-

- Preparation and care of patients with:
  - Traction, plaster, frames, braces and crutches
- Use of bed cradle assessing in application of skin/skeletal traction and plaster preparation and assist on the specific orthopedic investigation.
- Teaching individual and family about the possible of temporary and permanent disabilities as a result of illness
- Maintaining reports and records of patient's condition.
- Providing nursing care by using nursing process.
- Preparing neurological tray for neurological examination of clients

### Nursing care of patient with respiratory disorder

- Providing care to patients with respiratory disorders by using nursing process.
- Prepared and provide nursing care of clients receiving specific investigation and treatments
- Practicing postural drainage on patients with respiratory disorder under supervision.
- Providing care for clients with under water seal drainage and closed chest tube drainage.
- Administering oxygen therapy

**Nursing care of patients with renal disorders**

- Providing care to the patients with elimination problems by using nursing process.
- Preparing and care for clients receiving specific investigation and treatment.
- Performing procedures e. g. bladder irrigation, catheterizations, enema etc.
- Post –operative care of clients undergoing genitourinary tract operation.

**Nursing care of patients with fluid and electrolyte imbalance**

- Providing care to the patients with fluid and electrolyte imbalance by using nursing process.
- Observing for signs and symptoms of shock, provide immediate care as indicated, recognize the cause of shock and take appropriate action and preventive measures.
- Give I/V fluid, including blood transfusion.
- Providing rehydration therapy.

**Nursing care of patients with gastrointestinal and nutritional disorders**

- Providing care to the patients with gastrointestinal and nutritional problem by using nursing process.
- Preparing and caring for clients with specific investigations and treatments
  - Insertion of Ryle’s tube
  - Care of Ryle’s tube and aspiration
  - Ryle’s tube feeding
  - Care of the patient with colostomy

**Nursing care of patients with skin problems**

- Providing care for the patients with skin problem by using nursing process.
- Providing necessary treatment and dressing
- Burn treatment and dressing
- Provide psychological support

**Nursing care of patients with cardiovascular problems**

- Providing care for the patients with cardiovascular problem by using nursing process.
- Preparing and caring the clients for specific investigations and treatment.
- Managing hemorrhage.
- Demonstrating cardiac massages on dummy and resuscitation procedures if possible in real clients

**Nursing care of patients with sensory overload and deficit Problems**

- Providing care for the patients with sensory disorder by using nursing process
- Preparing and caring for patients receiving specific investigation and treatment.
- Inserting of nasal packing
- Caring of the patient with tracheotomy.
- Performing suctioning
  - nasal, oral, tracheal

**Nursing care of patients with endocrine problems**

- Providing care to the patients with endocrine problem by using nursing process
- Preparing and care for patients –receiving specific investigations and treatment.
- Recording sleeping pulse rate for patients with thyrotoxicosis.
- Administration of
  - Insulin therapy
  - Cortisone therapy
- Teaching patients for self administration of insulin, urine test, diet, exercise and complications of diabetes

**Nursing care of patients with cell metabolism alteration**

- Providing care to the clients with alteration in cell metabolism by using nursing process
- Preparing and care for receiving specific investigation and treatment including radiation and chemotherapy.

# Medical and Surgical Nursing II (Theory)

Theory: 50 hours

## Course Description

This course is designed to develop knowledge, skills of students to provide nursing care to adults with the disorders of the special sensory organs (Eye, ear, nose and throat) and to develop knowledge skill attitude related to operation theatre nursing-

## Course Objectives

After completion of this course the students will be able to:

- Describe the etiology, clinical features, complication, investigation and treatment and nursing care of adult patients with eye, ear, nose, throat and oral disorders
- Discuss the nursing responsibilities in carrying out the different diagnostic procedure related to eye ear nose throat
- Describe the role and responsibilities of a nurse in different areas (scrub, circulating, recovery, anesthesia) of operation theater (OT)
- Describe various types of anesthesia, it's route of administration, dose, indications, contraindications, side effects, complications
- Explain pre and post-operative care of patient in operation theater

## Unit 1: Disorders of Eye

9 hrs

1.1 Review anatomy and physiology

1hrs

1.2 Definition, Etiology, sign and symptoms, investigation, treatment, nursing management of patient with following disorders: 8hrs

- **Eye Lids:** Blepharitis, chalazion Stye, Hordeolum, Trachoma Entropion, ectropion
- **Cornea :** Corneal ulcer, foreign body
- **Conjunctiva:** Conjunctivitis, Pterygium, Pinguecula,
- **Retina:** Retinopathy(Diabetic, Hypertensive) ,Retinal detachment,
- **Lens:** cataract
- **Others :**Glaucoma Squint, Strabismus, Xerophthalmia,Blindness

1.3 Pre and post up care of the patients with eye surgery

## Unit 2: Disorder of Ear

8 hrs

2.1 Review anatomy and physiology

2hrs

2.2 **Definition,** Etiology, sign and symptoms, investigation, treatment, nursing management of patient with following disorders: 2hrs

- Foreign body, impacted wax or cerumen, otitis media  
Mastoiditis, Menier's disease, otosclerosis, Labyrinthitis, hearing impairment/Deafness, tumors of ear

2.3, Diagnostic investigations used in ear disorder and nursingresponsibilites

2hrs

2.4 Pre and post-operative nursing care of the patients with ear surgery

2hrs

## Unit 3: Disorder of nose and throat

8 hrs

3.1 **Definition,** Etiology, sign and symptoms, investigation, treatment, nursing management of patient with following disorders:

3.2 Nose disorder	2hrs
<ul style="list-style-type: none"> <li>• Foreign body at nose</li> <li>• Sinusitis, rhinitis,</li> <li>• Deviated nasal septum,</li> <li>• Epistaxis,</li> <li>• Polyps and tumors</li> </ul>	
3.3 Oral and throat Disorders	2hrs
<ul style="list-style-type: none"> <li>• Definition ,Etiology, sign and symptoms, investigation, treatment, Nursing management of patient with following disorders: Foreign body at throat</li> <li>• Glossitis, laryngitis, Tonsillitis, pharyngitis</li> <li>• Tumours of larynx</li> </ul>	
3:4 Diagnostic investigations used in nose and throat disorders including nursing implications	2hrs
3:5 Special nursing Care of clients with following conditions/procedures	2hrs
<ul style="list-style-type: none"> <li>• Endotracheal tube (Oral suctioning)</li> <li>• Tracheostomy</li> </ul>	
<b>Unit: 4 Operation Theatres Nursing</b>	<b>25 Hrs</b>
4.1 History of surgery	1hrs
4.2 Qualities of the OT nurse	1hrs
4.3 Introduction to intra-operative nursing	1hrs
4.4 Function and management of OT	3hrs
<ul style="list-style-type: none"> <li>• Operation consent</li> <li>• Identifying Basic instruments used in different surgery</li> <li>• Counting instrument swabs</li> <li>• Labeling and dispatch of specimens in time</li> <li>• Sterilization</li> <li>• Maintenance of aseptic technique, sterilization of equipment and supplies</li> <li>• Scrubbing, gowning and gloving</li> <li>• Preventing OT hazards</li> </ul>	
4.5 Instrument processing pre-cleaning, decontamination, cleaning, packing sterilization and different level of disinfection.	2hrs
4.6 instrument storage	1hrs
4.7 Responsibilities of the scrub nurse, circulating nurses and recovery nurse	1hrs
4.8 Anesthesia: Stages and types including, contraindication, side effects and complications	3hrs
<ul style="list-style-type: none"> <li>- General anesthesia</li> <li>- Regional anesthesia: Spinal, epidural, caudal, nerve block</li> <li>- Local anesthesia</li> <li>- Topical anesthesia</li> <li>- Preoperative goals and patient assessment: Assessment of all systems, age, pain, nutritional status, fluid and electrolyte balance, infection and immunity, hematological function, estimating medical risks, anesthesia and anesthetic risk</li> </ul>	
4.9 Preoperative Care	3hrs
<ul style="list-style-type: none"> <li>- Preparation of skin and GI tract</li> </ul>	

- Nutritional therapy
  - Psychosocial assessment and anxiety reduction
  - Deep breathing and coughing exercises
  - Pain management
  - Preoperative teaching to prevent postoperative complications
- 4.10 Immediate preparation on the day of surgery 3hrs
- Consent for surgery/Diagnosis/Therapeutic procedures
  - Preoperative medications
  - Transferring the patient with identification card to OT
  - Preparing the patient bed/room for post-operative care
- 4.11 Intra operative nursing care 2hrs
- Maintaining safety and preventing injury
  - Positioning the client
  - Maintaining equipment safety
  - Maintaining asepsis
  - Assisting in wound closure
  - Monitoring: Respiratory system, cardiovascular system, central nervous system, temperature, gastrointestinal system, urinary system and allergic reactions
- 4.12 Care of the patients in post anaesthesia room (Recovery room) 2hrs
- Immediate assessment of patient (airway, breathing, circulation, pain, incision site and others (level of consciousness))
  - Oxygen and fluid therapy
  - Pain management
  - Monitoring and management of Post-operative complication: Shock, Hemorrhage,
  - Transfer the patient from post anesthesia care unit to postoperative ward
- 4.13 Medico-legal and ethical consideration in nursing activities 2hrs

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# Medical and Surgical Nursing II (Practical)

**Practical: 175 hours**

## Course Description

This course provides opportunity for students to apply knowledge Medical and Surgical Nursing II (theory) to the clinical situation. The student will use the nursing process in the care of patient with the ear, eye, nose, and throat disorders. In addition the student will gain the experience in working in operation theatre.

## Course Objectives

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

- Use the nursing process in giving comprehensive care to the adult patients with eye, ear, nose and throat disorders.
- Apply knowledge from the physical and social science in planning and implementing the care of physically and mentally ill patients.
- Teach and counsel individual and family for self care.
- Provide preoperative, intraoperative, and postoperative nursing care for patients undergoing surgery.
- Assist the scrub and circulating nurses in the activities of meeting the needs of patients in operation theatre.

## Pre and post operative care of the patients undergoing surgery

Each student will provide comprehensive care that is care of the patients' pre operatively, at the operation theater and take care of the clients postoperatively for each patient.

- Pre operative teaching to the patients undergoing surgery.
- Preparing pre operative checklist
- Preventing, Monitoring and managing potential postoperative problems and complication.
- Immediate postoperative in post anaesthetic unit care and
- Later care in postoperative /surgical ward.
- Developing clear communication skill (handover/takeover of patient( right patient, right surgery)

## Intra operative care of patients in OT

Each student will be assigned in operation theatre to observe various kinds of operations and to learn the role of the scrub and circulating nurse. They will carry out the following activities

- Performing surgical scrub, gowning and gloving.
- Watching the patients with an anesthesia and prevent them from potential problems.
- Observing operative/surgical procedures and positioning of patients incisions used for different surgeries.
- Observing and identifying basic instruments, sutures, needles, drain tubes used in the surgery operation.
- Developing skill on packing linens equipments/instruments
- and sterilizing them with different methods.
- Identifying the drugs and chemical solutions including their uses and safety in OT
- Taking safety precautions in operation theatre before during and after operation.
- Preparing the patients for different type of anesthesia.
- Prepare report of common OT gadgets and their use

# Geriatric Nursing (Theory)

Theory: 50 hours

## Course Description:

This course is focused on the study of physiological, psychosocial and cognitive changes, common problem related to ageing and their nursing management and policies and programs related to the ageing population.

## Objectives:

- Explain the concept and theory of aging.
- Explain the physiological, cognitive and psychological changes of aging.
- Discuss common health problems among aging population.
- Explain the nursing management of common health problem of aging people
- Utilise nursing process to provide comprehensive care to aging people
- Demonstrate knowledge regarding the resources available for meeting the health needs of aging people.
- Identify increasing demand for nursing care in parallel with the increase of life expectancy of aging people

<b>Unit 1: Introduction of Gerontology and Geriatric Nursing</b>	<b>12hrs</b>
1.1 Definition of Gerontology, Geriatric Nursing	1hrs
1.2 Theories of aging	2hrs
- Programmed theories: biological theory	
- Damage or error theories: psychosocial theory	
1.3 Manifestations of Aging Processes	2hrs
- General characteristics	
- Physiological Changes	
- Mental/Psychological process	
1.4 Developmental task of elderly	2hrs
1.5 Health assessment	2hrs
- Physical assessment	
- Psysocial assessment	
1.6 Nursing management of the following conditions:	2hrs
- Sleep disturbance,	
- Confusion,	
- depression,	
- suicidal tendency,	
- dementia	
1.7 Nursing roles and responsibilities of ageing peoples	1hrs
<b>Unit 2: Ageing population in Nepal</b>	<b>3 hrs</b>
• Trends and issues of Elderly Population in Nepal	
- Migrant employee , nuclear family, poverty, health issues	
- Abandonment, technology, depression, trauma, and stress	

**Unit 3: National and International Concern and declaration and aging** **2hrs**

- (ICPD) on aging – 1994
- National Policies and strategic

**Unit 4: Common Geriatric Problems** **15hrs**

**4.1 common physical problems of different body systems and their management** 10hrs

- Cardiovascular: hypertension, atherosclerosis, arteriosclerosis, CAD, Cardiac failure, anaemia,
- Respiratory: COPD, asthma, pneumonia
- Gastro Intestinal: anorexia, indigestion, constipation, fecal impaction, lactose intolerance, hiatal hernia, atrophic gastritis, diverticulitis
- Musculo –Skeletal: osteoporosis, osteoarthritis, spondylitis, backache, myalgia
- Genito Urinary: UTI, incontinence, renal failure, sexual dysfunction
- Neurological: stroke, dementia, Parkinson's disease
- Endocrine: hypothyroidism, hyperthyroidism
- Sensory deficit: hearing deficit, vision deficit
- Dermatologic
- Reproductive System: Pelvic organ prolapsed, atrophic vaginitis, benign prostate hypertrophy, cancer

**4.2: Psychosocial problems** **5hrs**

Sleep disturbance, Confusion, anxiety/depression, suicidal tendency, social isolation, loneliness, empty nest syndrome, sun down syndrome, dementia, paranoid disorder

Nursing management of elder patients with psychological problems

**Unit 5: Nursing care of the terminally ill** **6 hrs**

- Terms related to terminally ill **1 hrs**
  - Chronic illness
  - Holistic care
  - Hospice care
  - Palliative Care
- Grief and Loss **1hrs**
  - Stages of grief and loss
- Care of dying elderly **1hrs**
- Responsibility of nurse regarding terminally ill patient **1hrs**
- Family and community support/responsibility **1hrs**
- Community Home based care **1hrs**

**Unit 6: The common needs of elderly (health promotion activities)** **2 hrs**

- Nutritional need
- Rest and sleep
- Safety and security
- Psychosocial need
- Activities of daily living (ADLs)
- Regular health check up
- Psychosocial need
- Religious /Spiritual need
- Stress management

**Unit 7: Safe Medication use for elderly people** **2hrs**

- Response of older adults to drug
- Pharmacokinetics
- Pharmacodynamics
- Promoting the safe use of drug
- Alternatives to drug

**Unit 8: Different facilities for Health Care Services: National and international** **8 hrs**

- Senior citizen home/hospital
- Home base health care
- Daycare center
- Social services
- Community base rehabilitation centers
- Nutrition/Foods service

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# Geriatric Nursing (Practical)

Total: 70 hours (2 weeks)

## Course Description

This practical course is designed to apply Geriatric nursing theory, concepts, and principles into the practical measures with holistic approaches in the care of elderly patients in clinical areas (hospital/geriatric center/community centre). The patient-centred care based on physiological and psychosocial, cognitive needs or problems with addressing the curative, preventive, promotive and rehabilitative services to alleviate diseases and injuries will be applied as well as the national policies regarding their rights will be identified during their practicum.

## OBJECTIVES:

- Identify common health needs and problems
- Provide patient-centred care in holistic care approach to the elderly patients/clients using nursing process.
- Use of effective information and communication in the care of elderly.
- Educate individual, family and community on care of clients.

## ACTIVITIES:

The common geriatric problems:

- Physiological: Bones and joints, muscle and body fat, digestive and metabolic, urogenital, dental (gingivitis, periodontitis, loss of teeth), sensory deficit, skin, heart and blood vessel, lungs, multisystem alteration (cancer, urinary incontinence, immune system).
- Psychosocial changes: functional abilities, empty nest syndrome, sundown syndrome, changes in roles and responsibilities.
- Cognitive: Brain: dementia, Alzheimer's disease (AD), delirium, suicidal tendency, depression.

The common health needs of elderly and promotion of health

- Nutrition
- Rest and sleep
- Activities
- Safety measures
- Psychosocial need
- Spiritual well- being
- Periodic health check up

## Nursing care of the elderly with any terminal illnesses

- Cancer
- AIDS
- Alzheimer's disease,
- Lungs disease
- Heart disease,
- liver disease,
- multiple sclerosis
- Renaldisease

## **Visit/research different available elderly care facilities**

- Senior citizen home/old age home
- Home based health care
- Day care center
- Social services
- Community based rehabilitation centers

# Behavioural Science and Mental health Nursing (Theory)

Theory: 100 hours

## Part I: Behavioural Science

Theory: 50 hours

### Course description:

This course helps students to understand the basic concepts of human behaviour, their responses to the illness and wellness, as well as to prepare the students to provide nursing service to the client and families in better (acceptable) way.

### Course Objectives:

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

- Explain Psychology and its branches and apply psychology in various clinical areas.
- Review the anatomy of nervous system, and its functional unit and its linkage with stress, emotion and mental health.
- Explain psychological/ personality development theories. state the meaning of terms related to psychology and behavior: sensation, Attention, Perception, motives, intelligence and its application to nursing practice
- Describe the intelligence test and classify level of intelligence according to Intelligence Quotient (I. Q.)
- Explain learning, factors of effective learning, laws of learning
- Discuss the emotion and its effects on health.
- Understanding the concept of socialization, social behaviour and attitudes towards illness and treatment

## Contents

<b>Unit- 1- Understanding Psychology</b>	<b>7 hrs</b>
1.1 Define and introduce Psychology	1 hrs
• Terminologies used in Psychology	
• Introduction	
• Define Psychology	
• History and Origin of Science of Psychology	
• Nature of psychology	
1.2 Describe the methods to study behaviour/psychology	2hrs
• Observation method	
• Experimental/scientific method	
• The survey method	
• The test method	
• The case history or clinical method	
• The genetic or developmental method	
• The clinical method	
• The correlational method	
1.3 Explain the factors influencing /affecting human behavior	1hrs
• Heredity/nature	

<ul style="list-style-type: none"> <li>• Physiological</li> <li>• Environment/nurture               <ul style="list-style-type: none"> <li>– Intrauterine environment</li> <li>– Physical Environment</li> <li>– Psychosocial Environment</li> </ul> </li> <li>• Interaction between environment and heredity Personal habit, interest, will power, conscience</li> </ul>	
1.4 Explain different branches of psychology	1hrs
<ol style="list-style-type: none"> <li>1. Pure psychology</li> <li>2. Applied psychology and its branches.           <ul style="list-style-type: none"> <li>• General psychology</li> <li>• Clinical psychology</li> <li>• Child psychology</li> <li>• Social psychology</li> <li>• Developmental psychology</li> </ul> </li> </ol>	
1.5 Explain mind and body relationship	1hrs
<ul style="list-style-type: none"> <li>• Mind body dualism</li> <li>• Nervous system and body relation</li> <li>• Stress/thought and effect on body (Somatic effect)</li> </ul>	
1.6 Explain the scope/importance of the study of psychology for student nurses.	1hrs
<b>Unit: 2- Human Behaviour</b>	<b>2 hrs</b>
2.1 Review central nervous system, neuron, synapse, and neurotransmitter	
<ul style="list-style-type: none"> <li>• Central nervous system,</li> <li>• Neuron, synapse, and neurotransmitter</li> <li>• Peripheral nervous system and Autonomic nervous system</li> </ul>	
<b>Unit: 3- Psychological / Personality- Development and Theoretical Perspectives</b>	<b>8 hrs</b>
3.1 Definition of personality	1hrs
3.2 Describe the factors affecting personality	2hrs
<ul style="list-style-type: none"> <li>• Physiological factors</li> <li>• Psychological factors</li> <li>• Heredity</li> <li>• Social factors</li> </ul>	
3.3 Explain the personality development theories (psychodynamic perspectives)	2hrs
<ul style="list-style-type: none"> <li>• Psychoanalytic theory by Sigmund Freud</li> <li>• Psychosocial theory by Erik Erickson</li> <li>• Cognitive theory: Jean Piaget</li> <li>• Behavioural perspectives: I. Pavlov, B.F. Skinner (Detail in unit 7: Learning Theories)</li> </ul>	
3.4 Describe different methods of personality assessment	2hrs
<ul style="list-style-type: none"> <li>• Interview</li> <li>• Observation</li> <li>• Projective technique (Rorschach's ink blot test, Thematic Apperception Test)</li> <li>• Sentence completion test</li> </ul>	
3.5 Identify the importance of personality and the role of nurse	1hrs

<b>Unit: 4- Sensation, Attention and Perception</b>	<b>5 hrs</b>
4.1 Define: Sensation, Attention, Perception	1hrs
4.2 Differentiate between sensation and perception	1hrs
4.3 Describe the factors affecting perception	2hrs
• In the perceiver	
• In the object or target being perceived	
• In the context of the situation in which the perception is made.	
4.4 Explain abnormal perception: Hallucination, illusion	1hrs
<b>Unit: 5- Motives</b>	<b>6 hrs</b>
5.1 Define motive, motivation, drive, incentives	1hrs
5.2 Describe the types of motive	2hrs
• Biological (Primary) motive	
• Social (Secondary) or learned motive	
– Achievement	
– Affiliation	
– Aggression	
– Power	
– Curiosity	
– Need for status	
– Need for actualization	
• Unconscious motivation by Sigmund Freud	
5.3 Understand the behaviour of the client on the basis of different theories of motive	2hrs
• Drive reduction / Homeostasis or optimum level theory	
• Humanistic theory by Abraham Maslow	
• Incentive theory: B.F. Skinner’s Operant conditioning/ reward (Detail in unit 7: Learning Theories).	
5.4 Relate the theories of motive in dealing with the client	1hrs
<b>Unit: 6 Intelligence</b>	<b>5 hrs</b>
6.1 Define Intelligence	1hrs
6.2 State the characteristics of intelligence	1hrs
6.3 Describe the factors affecting intelligence	1hrs
• Heredity	
• Environment	
6.4 Describe different Intelligence test	1hrs
• Alfred Binet’s test	
• Stanford- Binet test	
• Wechsler adult and children intelligence test scale (WAIS)	
6.5 Describe Intelligence Quotient (I.Q.) and classify people on the basis of I. Q. level	1hrs
• Intelligence Quotient (I.Q.)	
• Classification of people on the basis of I. Q.	
<b>Unit: 7- Learning-</b>	<b>10 hrs</b>
7.1 Define Learning	1hrs
7.2 Describe the factors of effective learning	2hrs
• Nature of learner	
• Environment and materials	

• Types of learning experiences	
7.3 Describe the laws/principle of learning	3hrs
• Readiness for Learning	
• Law of exercise/ Use	
• Law of effect	
• Principle of Relevancy of Learning:	
• Principle of Sequence of Learning	
• Learning by Repetition	
• Law/Principle of reinforcement/ Role of Motivation	
7.4 Describe different theories of learning	2hrs
• E.L Thorndike- Trial and error:	
• I. Pavlov- Classical Conditioning	
• B.F. Skinners- Operant conditioning/ theory with reinforcement	
7.5 Apply knowledge of learning for self learning, and providing teaching activities.	2hrs
<b>Unit: 8 – Emotion and Feelings-</b>	<b>7 hrs</b>
8.1 Define emotion and feelings	1hrs
8.2 Differentiate between emotion and feeling	1hrs
8.3 Describe physiological and behavioural changes in emotion	2hrs
• Internal changes	
• External changes	
• Behavioural changes	
8.4 Explain the pattern of emotional development throughout lifespan	1hrs
8.5 Describe the emotion and its effect on health	1hrs
8.6 Explain the measures to control emotion	1hrs

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## Part II: Mental Health Nursing

Theory: 50 hours

### Course description:

This course focuses on the common psychiatric illness, its causes, treatment and nursing management of clients/patients with the problems and how to support individual and family at various health care settings.

### Course Objectives:

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

- Explain definition, prevalence, etiology, classification, diagnostic criteria, clinical features, treatment modalities and nursing management (by applying nursing process) of types of mental and psychiatric disorders.
- Identify the role /responsibilities of the mental health and psychiatric nurse in various settings.
- Identify, develop knowledge and skills about individual with mental health and psychiatric problems and understand the nursing management.
- Explain the importance of community mental health and psychiatric nursing.
- Explain the legal aspects related to mental health and psychiatric nursing in Nepal.
- Identify individual with substance and alcohol related disorders.

### Unit 1: Introduction to Mental Health

7 hrs

- |  |      |
|--|------|
| 1.1 Terminology used in Mental health nursing: Mental health, Mental health nursing, Mental illness    | 1hrs |
| 1.2 Historical development of psychiatric nursing  | 1hrs |
| 1.3 Characteristics of mentally healthy person/individual (Normalcy).                                  | 1hrs |
| 1.4 Major classification of mental disorder /illness: DSM-V and ICD-10 (with major sub-classification) | 1hrs |
| 1.5 Magnitude/prevalence of mental health problem in Nepal   | 1hrs |
| 1.6 Causes of mental illness   | 1hrs |
| 1.7 Myths and misconceptions of mental illness nursing   | 1hrs |

### Unit 2: Mental Health Assessment

3 hrs

- |                                     |      |
|-------------------------------------|------|
| 2.1 History Taking                  | 1hrs |
| 2.2 Mental status examination (MSE) | 2hrs |

### Unit 3: Psychosis and Schizophrenia related Disorder

4 hrs

Definition, prevalence, etiology, classification, diagnostic criteria, clinical features, treatment modalities and nursing management (by applying nursing process) of the following psychotic disorders:

- |  |      |
|--|------|
| 3.1 Acute psychotic disorder                   | 2hrs |
| 3.2 Chronic psychotic disorder (Schizophrenia) | 2hrs |

### Unit 4: Mood (Affective) Disorder

3 hrs

Definition, prevalence, etiology, classification, diagnostic criteria, clinical features, treatment modalities and nursing management (by applying nursing process) of the following mood disorders:

- Definition: normal mood, mood disorder, hypomania, bipolar I, bipolar II

- Major depressive disorder ( depression)
- Bipolar and Affective Disorder (BPAD)  
Mania

**Unit 5: Neurotic, Stress Related Disorder and Somatoform disorders** **4 hrs**

Definition, prevalence, etiology, classification, diagnostic criteria, clinical features, treatment modalities and nursing management (by applying nursing process) of the following neurotic/stress related disorders:

- |  |        |
|--|--------|
| 5.1 Generalized anxiety disorder       | 0.5hrs |
| 5.2 Phobic anxiety disorder            | 0.5hrs |
| 5.3 Dissociative (Conversion) disorder | 1hrs   |
| 5.4 Obsessive compulsive disorders     | 1hrs   |
| 5.5 Psychosomatic disorders            | 1hrs   |

Types

- Peptic ulcer
- Bronchial asthma
- Hypertension
- Ulcerative colitis
- Irritative bowel syndrome

**Unit 6: Adult Personality disorder** **2 hrs**

Definition, prevalence, etiology, classification, diagnostic criteria, clinical features, treatment modalities and nursing management (by applying nursing process) of the following personality disorders:

- Definition: personality and personality disorder
- A etiology of personality disorder
- Types of personality disorder
  - Paranoid personality disorder
  - Schizoid personality disorder
  - Histrionic personality disorder
  - Obsessive compulsive personality disorder
  - Antisocial personality disorder

**Unit 7: Mental and Behavioral Disorder due to Psychoactive Substance Use** **4 hrs**

Include definition, types, prevalence, etiology, acute intoxication symptoms, withdrawal symptoms of following substance use disorder dependence criteria of substance, complication, treatment modalities (detoxification, deterrent therapy, psychological management: counselling, skill training, individual, group and family therapy, Behaviour therapy, cue exposure, behavioural self-control training, CBT, self-help groups

- Terminologies related to substance use disorder: Abuse, misuse, harmful use, substance, dependence, intoxication, withdrawal, alcoholism, alcoholic, social drinker.
- Alcohol use disorder(alcohol withdrawal include delirium tremens)
- Drug use disorder:
  - Opioid use disorder
  - Cannabises/ Marijuana use disorder
  - Cocaine
- Prevention and rehabilitation of substance abuse

**Unit 8: Childhood psychiatric disorders****6 hrs**

Definition, prevalence, etiology, classification, diagnostic criteria, clinical features, treatment modalities and nursing management (by applying nursing process) of the following childhood mental disorders:

- 8.1 Intellectual disability (Mental retardation)
- 8.2 Attention deficit hyperactive disorders
- 8.3 Emotional disorders
  - Separation anxiety
  - School phobia
- 8.4 Other behavioural and emotional disorders
  - Enuresis, encopresis, pica
  
- 8.5 Sleep disorder- nightmares, night terror

**Unit 9: Mental health problem in old age****2 hrs**

Define list types, enlist prevalence, describe etiology, classification, diagnostic criteria, clinical features, treatment modalities and explain nursing management (by applying nursing process) of the following old age mental disorders:

- Dementia
- Depression

**Unit 10: Psychiatric emergencies****3 hrs**

Define, describe etiology, classification, clinical features, treatment and explain nursing management (by applying nursing process) of the following psychiatric emergency condition:

- 10.1 Aggression, excitement and violence
- 10.2 Stupor
- 10.3 Suicide
- 10.4 Lithium toxicity

**Unit 11: Treatment modalities mental health nursing****8 hrs**

List out psychotropic drugs; describe the types, indications, contraindications, mechanism of action, route, dose, side effects, adverse effect and nursing management of following Therapies:

- Somatic Therapies
  - Psychopharmacology
    - Antipsychotic
    - Antidepressant
    - Anti-anxiety
    - Mood stabilizer
  - ECT (Electro convulsive therapy)
- Psychological Therapies
  - Individual and Group therapy
  - Behaviour therapy
  - Occupational therapy
  - Restraining
  - Counselling
  - Therapeutic community/ Milieu therapy

**Unit 12: Community mental health nursing****2 hrs**

- Definition, purpose of community mental health nursing
- Trends of care: Institutionalization, de-institutionalization
- Public health model of care:
  - Primordial prevention
  - Primary prevention
  - Secondary prevention
  - Tertiary prevention
- Role of nurses in community in prevention of mental health problem

**Unit 13: Legal aspects of mental health nursing****2 hrs**

- Mental health policy and strategies of Nepal
- Mental health acts
- Admission and discharge
- Right of the mentally ill person

**Teaching / Learning Activities / Resources:** Lecture/ Discussion, Problem based learning, Case study presentation, Group projects

**Evaluation methods:**

- Internal assessment: Written exam, Viva, Project work, Question and answer, Feedback, Class assignment and presentation
- Final examination: Written examination

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## **Behavioral Science and Mental Health Nursing (Practical)**

Practical: 70 hours

### **Course Description**

This course offers the student an opportunity to provide the holistic nursing care for the mentally ill patient by applying the principle of mental health nursing. This course also helps to develop skills therapeutic counseling.

### **Course of Objectives:**

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

- Provide care to patients/ families with mental health problems using nursing process.
- Performs history taking and mental status exams of the patient
- Prepare nursing care plans and provide individual care according to need
- Give health teaching according to need in groups and individuals
- Communicate effectively to teach/ counsel client/ family with focusing on their special needs
- Counsel the clients and families with psychiatric problems
- Find out the strategies used in treatment of methods

Teaching and learning activities

- Case study presentation-1
- Nursing care plan- 2
- Mental status examination-1
- Health teaching-1

# Community Health Nursing – II (Theory)

Theory: 100 hours

## Course Description

This course is designed to provide in depth knowledge to the students to enable them to carry out the activities such as family health nursing, sexual and reproductive health and rights, school health and school health nursing including national health programmes. It will also enable students to use knowledge, skill and behaviours for the total care of family, mother and newborn using the nursing process and applying National Neonatal Health Strategies and Reproductive Health protocol in the clinical settings.

## Course objectives

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

- Explain the concept of family, family health and family centered care
- State the roles and functions of the nurse in family health care
- Explain the objectives and activities of the national maternal and child health programmes of Nepal
- Describe sexual and reproductive health and rights and components integrated reproductive health package of Nepal
- Explain the sources and risk factors of sexually transmitted infections and reproductive tract infections
- Discuss the concept, importance and activities of under –five child health clinic
- Explain the importance of school health program and competencies of school health nurse
- Describe the importance of universal health coverage.
- State sustainable development goal and its targets relating to health.
- Identify the national health policy, programs and the national health care delivery system of Nepal

## Unit 1: Family Health Nursing

12 hrs

1.1 Definition and characteristics of family

1.2 Role and functions of family

1.3 Family as a basic unit of community

1.4 Definition of family health and family centred care

1.5 Objectives of family health and family centred care

1.6 Principle of family health

1.7 Social and cultural factors affecting family health

1.8 Family health practices guidelines

1.9 Family Health Care Plan (Family centred care)

- High risk, Low risk and no risk family

1.10 Family and family centred care

- Roles and functions of the nurse in the family health care

1.10.1 Family: definition, characteristics, role and functions, family as a basic unit of community

1.10.2 Family centred care: definition, objectives

1.10.3 Family health

- introduction, objectives,

- Principle
  - Social and cultural factors affecting family health
  - Family health practices guidelines
- 1.10.4 Family Health Care Plan (Family centred care)
- High risk, Low risk and no risk family
- 1.10.5 Roles and functions of the nurse in the family health care

1.11 Types of nurse family contact

- Home visit and family contact
- Group conference
- Written communication
- Industrial and School visit

1.12 Purpose and principles of nurse- family contact

1.13 Criteria for selection of nurse family contact

1.14 Nurse family contact

1.14.1 Types

- Home visit and family contact
- Group conference
- Written communication
- Industrial and School visit

1.14.2 Purpose and principles

1.14.3 Criteria for selection of nurse family contact

1.15 Nursing Process application (review)

- Assessment of family health problems
  1. Types of family health problems and nursing problems
    - Health threats , Health deficits, foreseeable crisis
  2. Difference between health problems and nursing problems –
    - Typology of problems (Freeman)
  3. Identification of family health problems
    - Ranking problems
- Planning nursing care and setting objectives
- Choosing alternative nursing action
- Evaluate the care given

**Unit 2: Maternal and Child Health Services**

**10 hrs**

2.1 Introduction

2.2 Development

2.3 Components of Child and Family health programme of the government of Nepal

2.3.1 Child health

- National Immunisation programme
- Nutrition
- Community based Integrated Management of Neonatal and Childhood Illness (CBIMNCI)

- 2.3.2 Family health
  - Family planning
  - Safe motherhood and newborn health
  - FCHV programme
  - Primary health care outreach
  - Demography and reproductive health Research
  - Adolescent sexual and reproductive health
- 2.4 Needs for MCH/CBIMNCI services
- 2.5 Goals of maternal and child health services
  - Antenatal care
    - Objectives of ANC
    - Activities of ANC
- 2.6 Status of Maternal and Child Health of Nepal
- 2.7 Maternal and Child mortality and morbidity and its causes
  - Maternal, perinatal, neonatal
  - Physical assessment
  - Vital signs
- 2.8 Growth Chart
  - Anthropometric measurement
- 2.9 Observation in clinical setting
  - Fulfillment of the objectives
  - Evaluation of the services provided by MCH/FP providers
  - Work load and work satisfaction of the service providers

### **Unit 3: Sexual and Reproductive Health and Rights**

**10 hrs**

- 3.1 Definition of Sexual Health, Reproductive Health, Sexual and Reproductive Health Rights (WHO/ICPD)
- 3.2 Components of integrated reproductive health package
  - Family planning
  - Safe motherhood
  - Child health (Newborn care)
  - Prevention and management of complications of abortion
  - Sexually Transmitted Infections/HIV/AIDS
  - Prevention and management of infertility
    - Adolescent sexual and reproductive health
    - Problems of elderly women (i.e. uterine, cervical and breast cancer treatment) at the tertiary level or in the private sector
    - Gender based violence
- 3.3 Sexual Rights of men and women
  - Control over own bodies.
  - Only have sex when, with whom and how they want to.
  - Live out their sexual orientation.
  - Not to be forced to have sex through the use of violence or coercion.
  - Have sexual enjoyment.
  - Be protected from diseases such as HIV and STIs.
  - Exercise the responsibilities that go with sexual rights.
- 3.4 Constitutional Rights to health care and Right of women

**Right to health care:**

- Every citizen shall have the right to seek basic health care services from the state and no citizen shall be deprived of emergency health care.
- Each person shall have the right to be informed about his/her health condition with regard to health care services.
- Each person shall have equal access to health care.
- Each citizen shall have the right to access to clean water and hygiene.

**Right of women:**

- Every woman shall have equal right to lineage without any gender discriminations.
- Every woman shall have the right relating to safe motherhood and reproductive health.
- There shall not be any physical, mental, sexual or psychological or any other kind of violence against women, or any kind of oppression based on religious, social and cultural tradition, and other practices. Such an act shall be punishable by law and the victim shall have the right to be compensation as provided for in law.
- Women shall have the right to access participate in all state structures and bodies on the basis of the principle of proportional inclusion.
- Women shall have the right to special opportunity in the spheres of education, health, employment and social security on the basis of positive discrimination.
- Both the spouses shall have equal rights in property and family affairs

## 3.5 Reproductive Rights

## 3.6 International Rights relating to sexual and reproductive rights

## 3.7 Prevention and Screening

## 3.8 Life cycle approach

**Unit 4: Sexually transmitted Infections (STIs)****10 hrs**

## 4.1 Definition and Types of STIs

## 4.2 Source of infection

## 4.3 Risk factors

## 4.4 Most common STIs prevalent in Nepal

- Gonorrhoea
- Syphilis
- Trichomoniasis
- Chlamydia Trachomatis
- Herpes genitalis
- Genital warts
- Candidiasis/bacterial vaginosis
- Chancroid
- HIV/AIDS
- Hepatitis B and C
- Granuloma Inguinale
- Lymphogranuloma Venereum

## 4.5 Interrelation Between STIs and HIV

- STI increases the risk of acquisition and transmission of HIV

- STI may influence the progress of immunodeficiency in HIV positive individuals
  - Concurrent HIV in an STI patient may change the natural history of the STI, Infectivity may be increased and treatment may be prolonged
- 4.6 Prevention and control of STIs: Primary and Secondary prevention
- 4.7 Main Symptoms and Signs of STIs (Both, Male and Female)
- 4.8 Management of STIs
- Objectives, Methods
- 4.9 Essentials of Syndromic STI Management

## **Unit 5: Under Five Clinics**

**10 hrs**

- 5.1 Concept and objective of under-five clinic
- 5.2 Registration in child health clinic
- Take history
  - Record vital signs
  - Physical assessment
  - Height/weight
  - Maintain growth chart
- 5.3 Growth chart
- Introduction
  - Uses
  - Plotting and interpretation of growth chart
  - Interpret the centile chart for height and weight
- 5.4 Community based Integrated Management of Neonatal and Childhood (CBIMNCI) guidelines (review from where, nursing care of children will be in third year) to detect abnormalities and common health problems of the children including treatment, referral and teaching:
- Gastro-intestinal problems
    - Diarrhoea, dysentery, vomiting
    - Worm infestation: roundworm, hookworm, thread worm, tapeworm
  - Nutritional problems
    - Marasmus, Kwashiorkor
    - Anaemia, Goiter and night blindness, Xerophthalmia
  - Respiratory problems
    - Pneumonia, Diphtheria
    - Pertussis, Common cold, cough and pulmonary tuberculosis
  - Viral Infections
    - Measles, German measles
    - Mumps, Chickenpox
    - Meningitis
  - Skin infections
    - Scabies, Rashes, Impetigo
    - Ringworm, Lice infestation
    - Heat rashes, Leprosy
  - Eye Infection
    - Trachoma, conjunctives
  - Ear Infection
    - Otitis medias
  - Protozoal Infection

- Malaria
- 5.5 Responsibilities in the management of common health problems of children
  - Medication
  - Motivation to family
  - Recording, reporting and follow up care
- 5.6 Responsibilities and activities of a nurse in child health clinic

## **Unit 6: Nutrition of Family and Community**

**12 hrs**

- 6.1 Definition of Meal planning
- 6.2 Factors affecting meal planning
  - Family structure
  - Income, customs and eating habits
  - Availability of food
  - Nutritive value of foods
  - Diabetics diet
  - HTN diet
  - Renal diet
  - Lactating mother diet
  - Expected mothers diet
- 6.3 Introduction of solid food to the infant
  - Nutritional needs of infants
  - Common practices and attitudes and their influences on infant nutrition
  - Use and preparation of local food resources for infants
  - Appropriate supplementary food for different age group of children
    - Age 6 months- 1 years
    - Aged 1-3 years
    - Aged 3-5 years
- 6.4 Nutritional deficiency types
  - Protein calorie malnutrition
  - Types-Kwashiorkor, Marasmus, MarasmicKwashiorkor
  - Sign and symptoms
  - Prevention and management
  - Use of SarbothampithoLito
- 6.5 Vitamin deficiencies
  - Vitamin A
  - Vitamin D deficiency (Early and late stage)
  - Vitamin B 1, B2, B3 B6 ,B12
  - Vitamin C deficiency
  - Signs and symptoms
- 6.6 Mineral deficiencies
  - Nutritional anaemia
  - Endemic goitre
  - Calcium deficiency
  - Signs and symptoms
  - Prevention and management

## **Unit 7: School Health Programme and School Health Nurse**

**16 hrs**

- 7.1 Definition of terms: School health program, School nursing, School health nurse, School nurse
- 7.2 Objectives of school health program
- 7.3 Purpose of school nursing
- Facilitate positive student responses to normal development
  - Promote health and safety
  - Intervene with actual and potential health problems
  - Provide case management services
  - Collaborate with others to build student and family for adaptation, self-management, self-advocacy and learning.
- 7.4 Activities (Aspects) and components of School Health Program
- 7.5 Target groups involved in the school health care
- Toddlers
  - Preschoolers
  - School age
  - Teenage
  - Adults (School teachers, support staff)
  - Children with special needs (disabilities)
- 7.6 Importance of School health nurse
- Having a full-time school nurse in every school as the “best means of ensuring a strong connection with each student’s medical home”
- 7.7 Qualities of a School health nurse
- Independent Confident in nursing skills
  - Awareness of your community factors
  - Culturally competent
  - Critical thinker
- 7.8 Level of School Nurse Practice
- Emergent school health nurse
  - Competent school health nurse
  - Proficient school health nurse
  - Expert school health nurse
- 7.9 Competencies of school health nurse
- Assessment: Collect, analyse and synthesize comprehensive data pertinent to the student’s health or the situation.
  - Diagnosis: Analyse assessment data to determine the nursing diagnoses and collective problems
  - Outcome Identification: Identify expected outcomes for a plan that is individualized to the student or the situation.
  - Planning: Develop a plan that prescribes strategies and alternatives to attain expected outcomes
  - Implementation: Implements the interventions identified in the plan of care/action
    1. Coordination of care: Coordinate for care delivery
    2. Health teaching and health promotion: Provide health education and employs strategies to promote health and a safe environment.
    3. Consultation: Provide consultation to influence the identified plan, enhance the abilities of others and effect change.

- Evaluation: Evaluate progress toward attainment of outcomes.
- Quality of Practice: Systematically evaluates the quality and effectiveness of nursing practice.
- Education: Attain the knowledge, skills and competencies required for quality practice in schools.
- Professional practice evaluation: Evaluate one's own nursing practice in relation to professional practice standards and guidelines, relevant statutes, rules and regulations.
- Collegiality: Interact with and contributes to the professional development of peers and school personnel as colleagues.
- Collaboration: Collaborate with student, family, school staff and others in the conduct of school nursing practice.
- Ethics: Integrate ethical provisions in all areas of practice.
- Research: Integrate research findings into practice.
- Resource utilization: Consider factors related to safety, effectiveness, cost and impact on practice in the planning and delivery of school nursing services.
- Leadership: Provide leadership in the professional practice setting and the profession.
- Programme Management: Manage school health services

#### 7.10 Roles and responsibilities of school health nurse

1. Provides direct healthcare to student and staff
  2. Provides leadership for the provision of health services
  3. Provides screening and referral for health conditions
  4. Promotes a healthy school environment
  5. Promotes health
  6. Leadership role for health policies and programs
  7. Liaison between school personnel, family, community, and health care providers.
- School Health Assessment Tool
  - Challenges for school health nurse
    1. Confusion regarding the role of the school nurse
    2. Only health care provider in an educational setting
    3. Appraised solely based on the number of tasks that they complete
    4. Funding for school nurse services
    5. Nurse to pupil ratio

### **Unit 8: Universal Health Coverage and Sustainable Development Goals** **8 hrs**

- 8.1 Definition and objectives
- 8.2 Requirement to achieve universal health coverage
- 8.3 Types of services
- 8.4 Ways of financing universal health coverage: financing ways
- 8.5 Ways to measure universal health coverage: measurement
- 8.6 Impact of universal health coverage on the population: Impact on population
- 8.7 Sustainable Development Goals

### **Unit 9: National Health Policy and Health Programme** **12 hrs**

- 9.1 National Health Policy 2071: Objective, targets and components
- 9.2. Current periodic (three/five-year) plan (targets and area covered).
- 9.3. Health profile of Nepal according to the latest Nepal Demographic and Health Survey
- 9.4 Organogram of National Healthcare Delivery System

9.5 Objectives, targets and activities (to be carried out at health post level) of National health programmes including:

9.5.1 Child health Program

- National Immunization Programme
- Nutrition Program
- CB-IMNCI

9.5.2 Family Health Program

- Family Planning
- Safe Motherhood
- FCHV Programme
- Primary Health Care Outreach
- Demography and Reproductive Health Research
- Adolescent Sexual and Reproductive Health (ASRH)

9.5.3 Disease Control

- Malaria
- Kalaazar
- Lymphatic Filariasis
- Dengue
- Zoonoses
- Leprosy
- Tuberculosis
- HIV/AIDS and STI
- Eye Care
- Entomology
- Epidemiology and Outbreak Management
- Disaster Management
- Surveillance and Research
- Homeopathic Services

9.5.4 Curative Services

9.5.5 Supportive Programmes

- Health Training
- National Health Education, Information and communication (NHEICC)
- Logistics Management
- Public Health Laboratory Services
- Personnel Administration
- Financial Management
- Health Service Management
- Primary Health care Revitalisation
- Medico-Legal Services
- Monitoring and Evaluation

9.6 International and national health organisations working in Nepal

- Concept of NGOs, INGOs, Bilateral and Multilateral organisation

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## School Health Program

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## **Community Health Nursing- II (Practical)**

Total Practical: 240 hours (8 weeks)

### **Course Description**

This course provides opportunity for students to expose in the family planning clinic, immunization, under five clinics and child health clinic in order to gain the practical experience to develop skills in providing FP/MCH service at the clinic settings. It also provides students to conduct school health programs and community interventions

### **Course objectives**

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

1. Set up MCH/FP clinic in advance in order to run the clinic smoothly.
2. Identify the problems of mother and child and make referrals to the appropriate agencies as needed.
3. Identify the normal and abnormal growth and development in children under 5 years
4. Identify, treat and teach parent and significant family members to prevent the common problems of children in the respective clinic.
5. Store, prepare and administer vaccines to children and childbearing women
6. Counsel about the use of various methods of FP available in Nepal
7. Dispense various FP methods
8. Assist in preparation for permanent FP methods
9. Plan and give health teaching to the individual and family members in the clinic
10. Develop and maintain public relation through use of effective communication skills.
11. Follow the process of infection prevention during FP/MCH procedures.
12. Maintain accurate records of the client's information.

### **Working with the individual clients/clinic staffs**

1. Develop good rapport with client, family members and clinic staff while working in the clinic.
2. Interview client in obtaining information
3. Maintain accurate records of the client's information.

### **Well child care**

1. Perform physical examination of under five children in the clinic by using CBIMNCI
2. guidelines
3. Teach families about prevention of health problems: clean water, hygiene, and accident prevention.
4. Identify, intervene and referral of children with health problem

### **Immunization**

1. Provide immunization to children and childbearing women according to the need in the respective clinic.
2. Evaluate of the procedures handling and storing vaccines.
3. Teach individuals family members and the group on the importance of immunization (Use Immunization in practice, WHO)
4. Assist in child health clinic by carrying out different function in the clinic such as:
  - Maintain registration

- Check vital signs
  - Measure and record height and weight
  - Monitor growth of under 5 children using Growth Monitoring Chart
  - Perform physical examination of newborn, infant and child from head to toe.
  - Identify and treat minor of health problems
  - Teach family members how to prevent common childhood health problem.
  - Refer cases to appropriate agency where necessary.
  - Identify children at risk for certain conditions, e.g. malnutrition, measles,skin infections
5. Conduct planned health teaching to target groups.

### **Maternal and child health/ family planning clinic**

1. Draw the organizational flow pattern of the clinic
2. Participate in the clinic.
3. Maintain records activities
4. Counsel clients
5. Teach and demonstrate FP methods to clients.
6. Provide depo, pills and condoms.
7. Assist in procedures for permanent methods of FP, e.g. Laparoscopy,mini-lap and tubectomy.
  - Prepare clients for the operation
  - Set up the tray for FP sterilization
  - Observe FP sterilization (VSC) procedure in operating theater
  - Care for the clients before and after operation
  - Provide health education to individual family members
8. Assist in procedures for insertion and removal of IUCD and implant.
9. Perform diet assessment before giving temporary methods (Use JHPIEGO manual)
10. Counsel to mothers about STIs/HIV/AIDS and importance of PMTCT
  - Effect of STIs/HIV/IDSs in pregnancy and during breast feeding

### **Family nursing care**

1. Plan for home visit
2. Set objectives
3. Assess individuals and family in home setting

### **Plan possible solution to solve the problems in school and community**

1. Implement plan of care
2. Evaluate the care and preplanning if needed
3. Conduct school health program

### **Nutritional Problems**

1. Assess nutritional status of mothers and children
2. Demonstrate the correct food preparation and feeding practices, considering the family's' culture economic status and the local resources

# Social Studies

Theory: 50 hours

## Course Description

This course offers an introduction to Nepal in general. It provides basic information about the geography, climate, natural resources, history, society, culture, politics, economy and social stratification of Nepal. Students will identify current social problems and issues related to nursing and will discuss it in relation to the country's features.

## Course Objectives

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

- Identify the climate, geography, natural resources and administrative units of Nepal.
- Summarize the history of Nepal.
- Describe the culture of Nepal.
- Describe characteristics of good governance in relation to population health.
- Distinguish between democratic and non-democratic forms of government and its effect in health status of population.
- Describe the major changes in people's lives and health conditions after the major political movements.
- Explain social stratification and its relation with health status of population.
- Identify the major health problems and issues in Nepalese context.
- Explain Nepalese population characteristics and its effect in health.
- Identify the salient features of Nepalese economy.
- Describe socialization and its effects in health behavior.

## Course Contents

<b>Unit 1: Physical features of Nepal</b>	<b>4 hrs</b>
1.1 Geographical locations and diversities	
• Ecologic	
• Climatic	
• Rivers	
• Vegetation	
• Administrative units	
• Natural resource of Nepal	
• Patterns of land use in Nepal.	
• Regions: mountain, hills and Terai and its major characteristics	
<b>Unit 2: Political history of Nepal</b>	<b>6hrs</b>
2.1 Ancient history of Nepal	2hrs
• Origin of name "Nepal"	
• Major periods	
• Political structure/situation	
• Economic status	
• Cultures	
2.2 Medieval history Nepal	2 hrs

<ul style="list-style-type: none"> <li>• Major periods</li> <li>• Political structure/situation</li> <li>• Economic status</li> <li>• Cultures</li> </ul>	2hrs
2.3 Modern history of Nepal	2hrs
<ul style="list-style-type: none"> <li>• Major period</li> <li>• Political structure/situation</li> <li>• Economic status</li> <li>• Cultures</li> </ul>	
<b>Unit 3: Governance system of Nepal</b>	<b>10 hrs</b>
3.1 Meaning, types and characteristics of governance	1hrs
3.2 People's movement of 2046 and its major characteristics.	1hrs
3.3 People's movement of 2063 and its major characteristics.	1hrs
3.4 Impacts of both movements in people's lives, livelihood and health of individuals, families and rural and urban communities.	2hrs
3.5 Democratic features of the constitution of 2047 and 2072 BS in relation to health	1hrs
3.6 Structure and functions of Federal Democratic Republic of Nepal	2hrs
3.7 Roles and responsibilities of federal, provincial and local government in health care delivery system	2hrs
<b>Unit 4: Nepalese society and culture in relation to health</b>	<b>14 hrs</b>
4.1 Meaning and importance society and culture	1hrs
4.2 Art and cultures and its impact in health	1hrs
4.3 Origin of caste and ethnic groups in Nepal	2hrs
4.4 Feast and festivals of various caste and ethnic groups	2hrs
<ul style="list-style-type: none"> <li>• Socio-economic status and its influence in health</li> <li>• Factors affecting Nepalese economy: poverty, inequality, population growth, unemployment and various disparities</li> </ul>	
4.5 Major health problems among different ethnicity.	2hrs
<ul style="list-style-type: none"> <li>• Health seeking behavior and care practices among major caste/ethnicity.</li> </ul>	
4.6 Language	2hrs
4.7 Religions	2hrs
4.8 Social stratification and its effects in people's lives and health	2hrs
<b>Unit 5: Demography and population</b>	<b>8 hrs</b>
5.1 Definition of demography and population.	1hrs
5.2 Population composition; sex and age-wise.	1hrs
5.3 Demographic transition and pattern of population growth since 2007 BS.	2hrs
5.4 Migration pattern, causes, attitudes and effects on population health.	1hrs
5.5 Fertility and mortality rate and its effects in population growth pattern.	2hrs
5.6 Population dynamics and its effects on health status of the people.	1hrs
<b>Unit 7: Socialization and health behavior</b>	<b>8 hrs</b>
6.1 Definition of socialization and social behavior	2hrs
6.2 Agent of socialization: family, peers, media, religion socio-cultural practices, sports, schools and other social institutions	3hrs
6.3 Health belief, attitude and practices towards illness and treatment	3hrs

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# Third Year

## Master Plan for 3rd year

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Study Block														

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Midwifery I, II &II											Gyaneocology Nursig			Child Health Nursing			

34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Leadership and Management Community								Vacation						Revision		Final Exam		

S.N.	Subject	Weeks	Shift	Hours	Weeks Distribution
1.	Leadership and Management (Hospital)	4	Morning (2 weeks x 6 days x 7 hrs) Evening (1 week 6 days x 7 hrs) Night (1 week x 6 nights x 12 hrs)	84 42 72	Study Block= 15 weeks Clinical Field=26 weeks Vacation=6 weeks Revision=2 weeks Final exam=3 weeks
2.	Leadership and Management (Community)	4	4 weeks x 6 days x 6 hrs	144	
3.	Midwifery I, II and III (Hospital and Community)	12	Morning (6 weeks x 5 days x 7 hrs) Evening (4 week x 5 days x 7 hrs) Night (2 week x 5 nights x 12 hrs)	210 140 120	
4.	Child Health Nursing	4	Morning (3 weeks x 5 days x 7 hrs) Evening (1 weeks x 5 days x 7 hrs)	105 35	
5.	Gyaecology Nursing	2	Morning (1 weeks x 5 days x 7 hrs) Evenig (1 weeks x 5 days x 7 hrs)	35 35	

# Midwifery - I (Theory)

Theory: 100 hours

## Course Description:

This course is designed to provide the students knowledge on pregnancy and care of women during pregnancy. It also covers obstetrical assessment and wellbeing of the fetus, birth preparedness and prevention of the complication during pregnancy and care in hospital, home and community setting for safer pregnancy. It also enables the students to identify the abnormal condition of women and fetus, their management and referral at time.

## Course Objectives:

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

- Define terms used in care of pregnant women and foetus.
- Explain concept of midwifery, maternity nursing ,midwives ,maternity nurse safemotherhood, Skilled Birth Attendant (SBA )
- Describe the history of Midwifery in Nepal
- Describe the conception and development of fetus and placenta
- Explain the assessment of pregnant women including fetus and their physical and obstetrical conditions.
- Explain the antenatal care and its importance for safer pregnancy and child birth
- Describe the care of women and fetus during antenatal period and referral as per their need.
- Explain the communication and information system in antenatal period
- Explain the communication in relation of counseling, teaching on health information and relationship with women, spouse and family and also community as per need.
- Identify the immunization during pregnancy
- Identify the Special Laboratory investigation needed during pregnancy to protect from communicable disease and blood ABO incompatibility
- Explain the birth preparedness and complication readiness.

<b>Unit 1:</b> Midwifery and Reproductive Health	8hrs
1.1 Definition of midwives, Midwifery/SBA, Maternity Nursing	1hrs
1.2 Terminologies used in midwifery	1hrs
<ul style="list-style-type: none"><li>• Conception</li><li>• Fertilization</li><li>• Obstetrics</li><li>• Gynecology</li><li>• Reproduction</li><li>• Genetics</li><li>• Pregnancy</li><li>• Gestation</li><li>• labour</li><li>• Para</li><li>• Gravida</li></ul>	
1.3 Short history of midwifery: education /service (International/National )	1hrs

Trend and evolution of Midwifery education and service in Nepal:

- Before establishment of Nursing School
- After establishment of Nursing school
- Islambad WHO workshop
- Post islambad workshop in Dhulikhel
  - Roadmap of SBA service in Nepal
  - Long term health plan 2006 – SBA training
- Establishment of seperate Midwifery Education

1.4 Sexual/ Reproductive Health (SRH) 1hrs

- Introduction/Concept
- Component of RH
- Component

1.5 Safe motherhood: 1hrs

- National strategies policy and plan of Safe motherhood in Nepal
- Role and responsibilities of a midwife and Maternity Nurse

1.6 Ethical and legal aspect in midwifery / maternity nursing/implication to prevent the clients from harm and to protect the midwives from legal action 2hrs

- Nurses Scope of practice in Maternity Nursing
- Ethics in Maternity Nursing
- Ethical issuses may arise in care of women in antenatal.
- Respectful maternity care
- Right of women in pregnancy, labour and breast feeding
- Code of ethic for Maternity nurses
- ICN/ ICM /NNC (MNC) and
- Midwifery regulation

1.7 Respectful maternity care 1hrs

**Unit 2:** Anatomy and physiology of reproductive system 8hrs

2.1 Review of Male reproductive system

2.2 Review of female reproductive system

- Vulva and Vagina
- Uterus, Fallopiantube, and Ovary: structure, position, function and its relation to pregnancy.

2.3 Female Pelvis

- Bones
- Joints
- Ligaments. Parts Measurement
- Areas of pelvis brim and their significance
- Types of pelvic and their effect on birth
  - ✓ Gynaecoid
  - ✓ Android Anthropoid
  - ✓ Platypelloid

2.4 Pelvic Floor (Perineum) and Function

- Anatomy and Physiology
- Prevention of injury

- Pelvic floor exercise

**Unit 3: Menstruation and conception** **2hrs**

- 3.1 Menstrual cycle(review)
- 3.2 Conception (timing, usual site, physiology)

**Unit 4: Anatomy and Physiology of Male Reproductive System** **2hrs**

- 4.1. Male Reproductive System :A review the structure, position function and its relation to conception and pregnancy

**Unit 5: communication in relation of women and couple counseling.** **2hrs**

- 5.1 Communication : pre-conceptual- and genetic counseling

**Unit 6: Fetal and placental Development** **6hrs**

- 6.1 Development of fertilized ovum
- 6.2 Placenta, membranes and cord
  - Development
  - Functions
  - Malformation
  - Clinical implications

**Unit 7: Fetal circulation and its changes at birth** **6hrs**

- Fetal circulation and changes at birth
- Reason of difference between fetal and adult circulation.

**Unit 8: Fetal skull, its structure and relationship.** **6hrs**

- 8.1 Area of fetal skull and its importance
  - Land marks
  - Bones
  - Sutures
  - Fontanelles
  - Moulding
  - Measurement of fetal skull
- 8.2 Relationship of fetus to the uterus and pelvis ‘
  - Lie
  - Presentation
  - Attitude
  - Denominator
  - Position
  - Presenting part
  - Engagement
  - Station

**Unit 9: Physiological changes, psychological and emotional changes during pregnancy** **12 hrs**

- 9.1 Physiological Changes in 10 hrs
  - Reproductive system
  - Musculoskeletal system

<ul style="list-style-type: none"> <li>• Maternal weight</li> <li>• Breast and skin</li> <li>• Cardiovascular system</li> <li>• Respiratory system</li> <li>• Urinary system</li> <li>• Gastrointestinal system</li> <li>• Endocrine system</li> <li>• Changes in metabolism</li> </ul>	2 hrs
9.2 Psychological and Emotional changes during pregnancy	2 hrs
<b>Unit 10: Plain the sign and Symptoms of pregnancy and diagnosis.</b>	<b>4 hrs</b>
10.1 Signs and symptoms of pregnancy. <ul style="list-style-type: none"> <li>• Presumptive signs</li> <li>• Probable signs</li> <li>• Positive signs</li> </ul>	
<b>Unit 11: Antenatal examination (ANC) of women of and fetus during pregnancy.</b>	<b>12hrs</b>
11.1 Antenatal Care: An introduction 1hrs	
11.2 Purposes and importance	1hrs
11.3 Assessment of women	10 hrs
11.3.1 History taking: Past and Present/Personal and Family history <ul style="list-style-type: none"> <li>• General information</li> <li>• Medical history</li> <li>• Obstetrical history</li> <li>• Menstrual history</li> <li>• Last Menstrual Period-(LMP)</li> <li>• Calculate EDD and Gestational age</li> </ul>	
11.3.2 Physical Examination: <ul style="list-style-type: none"> <li>• General Examination Head to Toe (Review from Fundamental of Nursing)</li> </ul>	
11.3.3 Obstetrical Examination <ul style="list-style-type: none"> <li>• General Observation</li> <li>• Abdominal Palpation</li> <li>• Pelvic Palpation</li> <li>• Vaginal examination</li> </ul>	
11.3.4 General Pathological Investigations in ANC <ul style="list-style-type: none"> <li>• Urine,- sugar , albumin and other</li> <li>• Stool for worm infestation</li> <li>• Blood for Hb%, grouping /Rh factor,HIV/AIDS-HBV and C, VDRL</li> <li>• Ultra sonogram</li> <li>• x-ray</li> </ul>	
11.3.5 Assessment of Fetal wellbeing in ANC: <ul style="list-style-type: none"> <li>• Fetal Heart Sound (FHS)monitoring</li> <li>• Quickening and fetal movement</li> <li>• Size of fetus ( Gestational Age)</li> </ul>	

### 11.2.6 Special Care of women during Pregnancy

- Diet
- Hygiene, clothing and shoes
- Exercise
- Antenatal visit –National guideline/WHO
- Immunization
- Sexual Intercourse
- Smoking
- Traveling
- Drugs
- Preparation for birth:
  - ⊖ natural child birth techniques
  - ⊖ Birthing position in womens choice
- Birth preparedness and complication readiness
- PMTCT (Placental Mother to Child Transmission)

### 11.3.7 Behaviour change communication and Information with women, Spouse and family (Health teaching/Counselling)

## **Unit 12: Disorders of pregnancy and their management** **12 hrs**

### 12.1 Minor disorders of pregnancy in different systems

3 hrs

- GI system: morning sickness, heart burn, indigestion, constipation
- Circulatory system: varicose vein
- Skin: itching
- Musculo-skeletal system: backache
- leucorrhea
- Nervous system: carpal tunnel syndrome, syncope, insomnia
- Urinary system: frequent micturition
- Others: pica

### 12.2 Major disorders of pregnancy

3 hrs

- Hyper-emesis gravidarum
- Pregnancy induced hypertension (PIH)
- DIC,
- HELLP syndrome,
- Oligohydraminous and Polyhydraminous
- Pre-Eclampsia, Eclampsia

### 12.3 Bleeding in early pregnancy

3 hrs

- Abortion: threaten, inevitable
- Safe abortion and unsafe abortion  
- (MVA, CAC, PAC)
- Ectopic pregnancy
- Hydatiform mole
- Erosion of cervix
- Cervical polyps

12.4 Bleeding in late pregnancy	3 hrs
<ul style="list-style-type: none"> <li>• Antepartum hemorrhage (placenta previa, abruption placenta, vasa previa,</li> <li>• Accidental</li> </ul>	
<b>Unit 13: Explain Disease associated to pregnancy</b>	<b>6 hrs</b>
13.1 Disease and their sign and symptoms, effect and management	2 hrs
<ul style="list-style-type: none"> <li>• Diabetes</li> <li>• Tuberculosis</li> <li>• Jaundice</li> <li>• Rh incompatibility</li> <li>• Malaria</li> </ul>	
13.2 Disease and their sign and symptoms, effect and management	2 hrs
<ul style="list-style-type: none"> <li>• Anemia</li> <li>• Cardiac disease</li> <li>• STD including HIV/AIDS</li> <li>• TORCH infection</li> </ul>	
13.3 Effect of disease on:	2 hrs
<ul style="list-style-type: none"> <li>• Pregnancy, labor, puerperium</li> </ul>	
<b>Unit 14: Explain the Medication related to pregnancy</b>	<b>10 hrs</b>
14.1 Hematenics	
<ul style="list-style-type: none"> <li>• Oxytocin</li> <li>• Antibiotics</li> <li>• Magnesium Sulfate</li> </ul>	
14.5 Insulin	
<ul style="list-style-type: none"> <li>• Antihelminthics</li> <li>• Drugs used in cardiac disease</li> <li>• Tocolytic aents</li> <li>• Steroids (Dexamethosone)</li> <li>• Teratogenic drugs</li> <li>• Drugs allowed under SBA protocol</li> </ul>	
<b>Unit 15: documentation and Information System in relation of Antenatal</b>	<b>4 hrs</b>
15.1. Documentation and Information Systems in Antenatal:	
<ul style="list-style-type: none"> <li>• An Introduction,</li> <li>• Importance</li> <li>• Types -HMIS, ANC register , Card, MPDSR, Referral slip, and others</li> <li>• Verbal autopsy</li> </ul>	

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# Midwifery - I (Practical)

Practical: 150 hours

## Course Description

This course enables the student to apply knowledge in order to develop skill and attitude in care of women with pregnancy centre. They will develop the competency in providing antenatal care both in health facilities including assess the condition of mothers and fetus. It also enables them to find out the abnormal condition and refer to appropriate and home setting also helps in the basic essential obstetric care in applying life saving skill.

## Course objective

At the end of this clinical practice, student will be able to

- Set up the antenatal clinic in different setting
- Assess pregnant women to detect normal/abnormal condition of mother and fetus.
- Prepare women and family members to ensure healthy pregnancy, safe delivery and complication readiness.
- Teach and counsel the mother and family members based on their need to ensure optimal health of women and fetus during pregnancy
- Provide necessary care and support to women with normal and abnormal pregnancies including referral at time.

## Clinical Learning Practice

### Unit 1: Antenatal Assessment

- Set up the antenatal clinic in the health facility (student will not set up but practice in skill lab only).
- Assess the pregnant women in detailed by taking general, medical and obstretical history and physical and obstretical examination.
- Calculate expected date of delivery (EDD) and period of gestation (POG)
- Assess pregnant woman with all components of antenatal examination.
- Perform head to toe examination including abdominal examination
- Identify lie, presentation, position and engagement of fetus in utero.
- Monitor fetal growth and well being

### Unit 2: Antenatal screening tests

Student will prepare the pregnant women to carry out various screening tests

- Hemoglobin, blood grouping, RH-typing
- Urinalysis (Urine albumin, sugar)
- Random blood sugar
- VDRL, HIV, HVB and C
- Others (according to facility available)

### Unit 3: Information communication

#### *Health Teaching*

- Identification of the need of women for providing Health Information and Teaching
- Selection of appropriate topics and providing health teaching to the women, spouse and accompanied in ANC

- need of additional nutrition during pregnancy
- food taboos and beliefs),
- hygiene
- clothing and shoes
- exercise during pregnancy
- Minor ailments
- Danger signs during pregnancy
- Identification major disorders and their management and refer
- Birth preparedness and complication readiness plan
- Demonstration of possible exercise during antenatal period
- Inform her next visit and its important

#### **Unit 4: High Risk Pregnancies**

Identification and referral of:

- Vaginal bleeding (APH, abortion)
- Associated medical disorders(severe anemia, cardiac disease, diabetes, jaundice, UTI)
- Pregnancy induce hypertension (PIH)- pre-eclampsia and Eclampsia
- Hyper emesis gravidarum
- Rh. incompatibility
- Multiple pregnancy
- Malpresentations / Malposition
- Previous uterline surgery
- Other condition e.g. HIV infection, Hepatitis B

#### **Unit 5: Documentation**

- Recording **of information and data in relation** to the antenatal care
  - Antenatal Registration
  - Use of Antenatal card
  - Learning guide for each procedure simulationin skilled lab
  - NNC Logbook for practical recording

## Midwifery - II (Theory)

**Theory: 100 hours**

### **Course Description:**

This course is designed to provide the students knowledge and skill on the care of women on labor, assessing the stage of labor, conducting normal delivery, immediate care of newborn and prevention of complication including the recognition of abnormal condition and their management and referral.

### **Course Objective:**

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

- Explain labor, stages of labor and their sign and symptoms.
- Describe the physiology, sign and symptoms and theories on onset of labor.
- Describe the mechanism of normal labor
- Explain the different steps to be taken for conducting delivery and management of women in different stages of labor.
- Explain immediate care of new born babies for their survival
- Explain active management of third stages of labor and prevent the postpartum haemorrhage.
- Explain the possible complication of labor both for mother and newborn, their management and referral as per need.

### **Unit 1: Terminologies related to labor**

**2 hrs**

- Terms used in Labor
- Natal
- Gravid/Para
- Gestational age
- Presentation
- Position
- Presenting part
- Lie
- Engagement
- Denominator
- Labor/delivery
- Normal labor (Eutocia)
- Abnormal labor (Dystocia)

### **Unit 2: Normal Labor: The expulsivePhase**

**8 hrs**

2.1 Definition of labor, normal labor, abnormal labour

1 hrs

- Physiological changes in labor
- Stages of labor
- Sign and symptoms of differentstages of labor

2.2 Onset of labor

1 hrs

2.3 Theories and causes of onset of labor

1 hrs

2.4 True labor and false labor

1 hrs

- Premonitory signs of labor

2.5 Factors of labor

2 hrs

- Power

<ul style="list-style-type: none"> <li>• The passages</li> <li>• The passenger</li> <li>• The Psychological condition</li> </ul>	2 hrs
2.6 Vaginal Examination	2 hrs
<ul style="list-style-type: none"> <li>• Purpose</li> <li>• Indication</li> <li>• Contraindication</li> <li>• Procedure</li> </ul>	
<b>Unit 3: Mechanism of normal labor</b>	<b>6 hrs</b>
<ul style="list-style-type: none"> <li>• Engagement</li> <li>• Descent</li> <li>• Flexion of the head</li> <li>• Internal rotation of the head</li> <li>• Crowing of the head</li> <li>• Extension to the head</li> <li>• Restitution of head</li> <li>• Internal rotation of the shoulder</li> <li>• External rotation of head</li> <li>• Lateral flexion of the body (Restitution)</li> </ul>	
<b>Unit 4: Physiological change during 1<sup>st</sup> stage of labor</b>	<b>4 hrs</b>
<ul style="list-style-type: none"> <li>• Contraction and retraction of uterine muscles</li> <li>• Formation of upper and lower uterine segment</li> <li>• Development of retraction ring</li> <li>• Taking up the cervix</li> <li>• Dilatation of the cervix</li> <li>• Presence of show</li> <li>• Formation of the bag of water</li> <li>• General fluid pressure</li> <li>• Fetal axis pressure</li> <li>• Rupture of membrane</li> </ul>	
<b>Unit 5: Management of (first stage of labor) normal labor</b>	<b>10 hrs</b>
5.1 General management	3 hrs
<ul style="list-style-type: none"> <li>• Assessment of woman in labour</li> <li>• Admission procedure</li> <li>• Close supervision of the mother</li> <li>• Psychological and Emotional support</li> <li>• Maintenance of hygiene</li> <li>• Diet</li> <li>• Care of bowel and bladder</li> <li>• Posture and position</li> </ul>	
5.2 Management during first stage of labour	3 hrs
<ul style="list-style-type: none"> <li>• Fetal monitoring <ul style="list-style-type: none"> <li>- Fetal Heart Sound (FHS)</li> </ul> </li> </ul>	

<ul style="list-style-type: none"> <li>- Color of liquor</li> <li>• Maternal monitoring               <ul style="list-style-type: none"> <li>- Progress of labor</li> <li>- Cervical dilation</li> <li>- Uterine contraction</li> <li>- Station</li> </ul> </li> </ul>	
5.3 Active management of labor	4 hrs
<ul style="list-style-type: none"> <li>• Use of partograph               <ul style="list-style-type: none"> <li>- Purpose</li> <li>- Indication</li> <li>- Contraindication</li> <li>- Principle</li> <li>- Components</li> </ul> </li> </ul>	
<b>Unit 6: Physiological Changes during 2<sup>nd</sup> stage of labor</b>	<b>4 hrs</b>
<ul style="list-style-type: none"> <li>• Increase uterine contraction</li> <li>• Abdominal pressure</li> <li>• Distension of pelvic floor</li> <li>• Expulsion of fetus</li> </ul>	
<b>Unit 7: Management of 2<sup>nd</sup> stage of labor</b>	<b>14 hrs</b>
7.1 Constant supervision of maternal and fetal condition along with progress of labor	1 hrs
7.2 Preparation of delivery	2 hrs
<ul style="list-style-type: none"> <li>• Instruments preparation</li> <li>• Mother</li> <li>• Self (midwife) preparation</li> </ul>	
7.3 Steps of conducting normal delivery	1 hrs
7.4 Episiotomy	4 hrs
<ul style="list-style-type: none"> <li>• Purposes</li> <li>• Indication</li> <li>• Time for episiotomy</li> <li>• Types of episiotomy</li> <li>• Procedure</li> </ul>	
7.5 APGAR scoring	1 hrs
<ul style="list-style-type: none"> <li>• Meaning</li> <li>• Importance</li> <li>• Scoring technique</li> </ul>	
7.6 Immediate care of newborn (eight steps)	1 hrs
7.7 Helping Baby Breathe (HBB)	1 hrs
7.8 Essential newborn care	3 hrs
7.9 New born resuscitation	
<ul style="list-style-type: none"> <li>• Steps of resuscitation</li> <li>• Principle</li> <li>• Post procedure care</li> </ul>	

<b>Unit 8: Physiological changes during 3<sup>rd</sup> stage of labor</b>	<b>4 hrs</b>
8.1 Remarkable Uterine contraction	1 hrs
8.2 Separation of the placenta	1 hrs
8.3 Expulsion of the placenta	1 hrs
8.4 Control of bleeding	1 hrs
<b>Unit 9: Management of 3<sup>rd</sup> stage of labor</b>	<b>10 hrs</b>
9.1 Observation of third stage of labor	2 hrs
9.2 Active management of third stage of labour	2 hrs
9.3 Methods of placenta delivery	2 hrs
• Maternal effort	
• Controlled cord traction	
• Fundal pressure	
9.4 Examination of birth canal after delivery and its importance in complication prevention.	2 hrs
9.5 Placenta examination	2 hrs
• Process	
• Importance	
Normal and abnormal findings and its clinical significance	
<b>Unit10: Drugs used in labor (Indication, route, action, side effects and its management)</b>	<b>4 hrs</b>
• Sedation	
• Oxytoxic	
• Prostaglandin	
• Misoprostol	
• Epidocin	
• Drugs used for neonates (respiratory stimulants)	
• Xylocaine	
• Vitamain k	
• Vitamin A	
• Epiduural block	
• Dexamethosone	
IV drip	
<b>Unit 11: Management of fourth stage of labor</b>	<b>2 hrs</b>
11.1 Care of mother and new born -	1 hrs
11.2 Documentation and information	1 hrs
(Recording and reporting)	
• Confinement Book	
• Birth Certificate	
• Blood Loss /Placenta completeness	
• Time of Baby Birth	
<b>Unit 12: Complication during 1<sup>st</sup> stage</b>	<b>6 hrs</b>
12.1 PPROM/PROM	1 hrs
12.2 Abnormal uterine contraction	1 hrs
12.3 Cervical dystopia	1 hrs
12.4 Prolonged labor	1 hrs

12.5 Maternal distress	1 hrs
12.6 Fetal distress	1 hrs
<b>Unit 13: Complication during 2<sup>nd</sup> stage of labor</b>	<b>6 Hrs</b>
13.1 Prolonged second stage	1 hrs
13.2 Fetal distress	2 hrs
13.3 Cord presentation and prolapsed	2 hrs
13. Maternal distress	1 hrs
<b>Unit 14: Complication during 3<sup>rd</sup> stage of labor</b>	<b>6 hrs</b>
14.1 Post- partum hemorrhage	1 hrs
14.2 Uterine inversion	2 hrs
14.3 Retain placenta	1 hrs
14.4 Obstetrical shock	1 hrs
14.5 Amniotic fluid embolism	1 hrs
<b>Unit 15: Abnormal labor (Definition causes and nursing management)</b>	<b>6 hrs</b>
15.1 Occipital posterior position	1 hrs
15.2 Multiple/Multifetal pregnancy	1 hrs
15.3 Malpresentation	2 hrs
• Face presentation	
• Brow presentation	
• Breech presentation	
• Unstable presentation	
15.4 Prematurity and Post dated/maturity	1 hrs
15.5 Muconium staining	1 hrs
<b>Unit 16: Surgical intervention during labor</b>	<b>6 hrs</b>
16.1 Methods of surgical intervention (definition and indication)	3 hrs
• Vacuum delivery	
• Forceps delivery	
• Episiotomy	
• Caesarean section	
16.2 Nursing management	3 hrs
• Preparation of mother	
• Preparation of equipment	
• Preparation of self	
• Post-procedure care	
<b>Unit 17: Obstructed and prolonged labor</b>	<b>4 hrs</b>
17.1 Prolonged labor	2 hrs
• Definition	
• Causes of prolonged labor: Passenger, power, passage	
• Management of prolonged labor	
• General and obstetrical management	
- During 1 <sup>st</sup> stage	
- During 2 <sup>nd</sup> stage	

## 17.2 Obstructed labor

2 hrs

- Definition
- Causes of obstructed labor
- Dangers of obstructed labor
- Management of obstructed labor

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## Midwifery – II (Practical)

Practical: 170 hours (4 weeks)

### Course Description:

This course is designed for developing the skill on care of women in labor through application of the theory into practice conducting normal delivery and care of new born babies for their survival. It also enable the students to identify the abnormal condition of mother and fetus during stage of labor, their management and referral including the recording the progress of labor using Partograph and other information documentation about mother and baby in relation of labor.

### Course Objectives

- Perform admission procedure of mother with labor pain and examine the mother thoroughly and confirm whether the mother is on labor or not.
- Care of women in labor at any setting including hospital, home and community settings.
- Identify and arrange the equipment needed for the labor in any situation.
- Conduct normal delivery ensuring optimal health of mother and neonate.
- Recognize any abnormalities arised during labor and immediate after child birth ,and take appropriate action.
- Counsel the mother, spouse and other family members about benefit of normal delivery, prevention of complications and promotion of health both mother and neonate at hospital and home settings.
- Take appropriate actions in case of emergency situation arised and refer appropriately at time.

### Clinical experience

Student's will be exposed to Labour Room and Admission Room for total312hours(eight weeks) hours in natal care. Students will apply knowledge, skill and attitude of holistic intra-partum care of women. This will include using the nursing process to provide holistic care to mother as well as baby. Students will be supervised full time during the clinical experience.

### Clinical Learning Practice:

1. Assessment of the women in labor and conform the women in labor.
  - admission of the women for labor
  - monitor the condition of mother and fetus and progress of labor regularly
  - Recording all the information using Partograph.
  - Care of mother as per the condition including diet ,cleanliness and bladder
  - Emotional and Psychological Support
2. Preparation of space for delivery as per the location (Hospital, Home or other-
  - simulation in skill lab and real practice of preparation in admission room , waiting room (ANC), labor room and neonatal corner of .selected clinical area
  - Monitoring the progress of labor and keep up to date record using partograph
3. Conducting Normal delivery safely
4. Immediate care of Neonate with scoring APGAR and use of ID card for baby  
Identification and initiation of Breastfeeding.

5. Assessment of Placenta completion and blood loss.

6 .Check the bleeding after delivery for mother and cord bleeding on baby.

7. Information and Communication

- Documentation of the information in relation of baby and mother-specially birth time, sex of baby, confinement book, birth certificate any other unwanted event if any.
- Counseling on care of mother and baby in postnatal –specially breast feeding ,infection prevention and diet

# Midwifery - III (Theory)

Theory: 100 hours

## Course Description

This course will provide in depth knowledge on the care of mother and neonate in the postpartum period focusing mainly on normal and abnormal puerperium including various condition of the new born. The students will learn how to assess the mother and baby condition so they can manage or refer appropriately. It will also enable students to use knowledge, skill and attitude for the total care of mother and newborn using the nursing process and by applying National Neonatal Health Strategies and R.H protocol in the hospital.

## Course objectives

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

- Describe physiological and psychological changes in puerperium.
- Discuss the purpose and need of nursing care during puerperium.
- Explains the goals, components and principle of post partum care.
- Explain the physiology of lactation and advantages of breast feeding.
- Identify the common disorders of breast and explains their nursing management
- Explain the minor and major disorders of mother with their management
- Discuss the congenital anomalies of newborn with their management.
- Describe the birth injuries of the newborns with their management and prevention.
- Identify the needs of mother and plan for health teaching.

## Unit 1: Introduction to Puerperium

**10 hrs**

1.1 Revision of physiological changes during pregnancy and labor

1 hrs

1.2 Puerperium (Characteristics and duration)

2 hrs

1.3 Changes during puerperium

4 hrs

1.3.1 Anatomical changes during puerperium

- Reproductive system
  - Involution of uterus
  - Involution of other pelvic structure
- Other system
  - Urinary system
  - GI system
  - Nervous system
  - Integumentary system
  - Musculo- skeletal system
  - Cardio vascular system
  - Endocrine system

1.3.2 Physiological changes during puerperium

- Lochia
- Vital signs
- Lactation
- Weight loss, fluid loss and blood loss

<ul style="list-style-type: none"> <li>• Menstruation and ovulation</li> </ul>	
1.3.3 Psychological changes	
1.3.4 Emotional changes	
1.4 Nursing care during puerperium	3 hrs
<ul style="list-style-type: none"> <li>• Prevent infection</li> <li>• Promote involution</li> <li>• Promote lactation</li> <li>• Provide emotional support</li> <li>• Help to care the baby</li> </ul>	
<b>Unit 2: Postpartum care</b>	<b>12 hrs</b>
2.1 Goals, components and principles of postpartum care.	1 hrs
2.2 Postnatal examination of mother	4 hrs
<ul style="list-style-type: none"> <li>• History</li> <li>• Purpose</li> <li>• Equipments</li> <li>• Procedure <ul style="list-style-type: none"> <li>- Vitals sign, breast, height of the fundus</li> <li>- Lochia, bowel/bladder elimination,</li> <li>- Lower extremities for sign of edema and thrombophelbitis, emotional status.</li> </ul> </li> </ul>	
2.3 Daily assessment of mothers	3 hrs
<ul style="list-style-type: none"> <li>• General wellbeing</li> <li>• Temperature, pulse and blood pressure</li> <li>• Urine examination, weight</li> <li>• Tiredness and fatigue</li> <li>• Uterus lochia, perineum, vulva and anus</li> <li>• Micturation and elimination</li> </ul>	
2.4 General care of mother	4 hrs
<ul style="list-style-type: none"> <li>• Rest and sleep</li> <li>• Diet and nutrition</li> <li>• Care of bowel and bladder</li> <li>• Clothing</li> <li>• Postnatal exercise</li> <li>• Emotional support</li> <li>• Perineal care, breast care</li> </ul>	
<b>Unit 3: Minor disorder of puerperium</b>	<b>6 hrs</b>
3.1 After pain	1 hrs
3.2 Sub involution of uterus	1 hrs
3.3 Retention of urine	1 hrs
3.4 Maternal blue/4 <sup>th</sup> day blue	1 hrs
3.5 Constipation and Hemorrhoids	1 hrs
3.6 Perineal pain	1 hrs

<b>Unit4: Major disorder of puerperium and their nursing management</b>	<b>6 hrs</b>
4.1 Puerperal sepsis/pyrexia	1 hrs
4.2 puerperal hemorrhages	1 hrs
4.3 Urinary tract infection and incontinence of urine	1 hrs
4.4 Vulval hematoma	1 hrs
4.5 Pulmonary embolism	1 hrs
4.6 Postnatal depression and psychosis	1 hrs
<b>Unit 5: Lactation management</b>	<b>9 hrs.</b>
5.1 Review anatomy breast	0.5 hrs
5.2 Physiology of lactation	1 hrs
• Mammogenesis	
• Lactogenesis	
• Galactokinesis	
• Galactopoiesis	
5.3 breast milk: Composition,	0.5 hrs
5.4 Advantages of breast feeding	1 hrs
5.5 Breast feeding techniques: position, attachment and suckling	1 hrs
5.6 Recommendation practice	1 hrs
5.7 Expressed breast milk: technique and storage	1 hrs
5.8 Suppression of lactation	0.5 hrs
5.9 Different method of feeding in special conditions (baby with HIV positive mother, cleft lip/palate, premature infant)	1 hrs
5.10 Breast milk substitute acts and regulation	0.5 hrs
5.11 Baby friendly hospital	1 hrs
<b>Unit 6: Common breast problem and their management</b>	<b>4 hrs</b>
Common breast problem	
Causes, Sign and symptoms, Prevention and Management of:	
• Abnormal nipple (long nipple, short nipple, abnormality large nipple, inverted and flat nipple)	
• Cracked nipple	
• Breast engorgement,	
• Plugged duct	
• Mastitis	
• Breast abscess	
<b>Unit 7: Care of newborn baby</b>	<b>10 hrs.</b>
7.1 Introduction of newborn baby	1 hrs
7.2 Physical features and characteristics of newborn	1 hrs
7.3 Physiological changes in newborn baby	4 hrs
• Initiation of respiration	
• Changes in circulation	
• Thermal regulation	
• Initiation of digestion	
• Renal regulation.	
• Reaction to organism.	
• Hemopoietic system	

- Fluid and electrolyte
- Gastro-intestinal system
- Renal system
- Integumentary system
- Musculo-skeletal system
- Endocrine system
- Neurological system
- Sensory system

7.4 Need of the newborn 2 hrs

- Warmth
- sleep
- feeding
- Protection from infection
- Safety and security
- elimination
- Protection from injury and Accident
- Immunization
- Care of baby
  - Bathing
  - Eye care
  - Cord care
  - Genitals care

7.5 Examination of newborn baby 1 hrs

- General appearance
- Vital signs
- Measurement
- Head
- Eyes
- Mouth
- Abdomen -Umbilical cord
- External genitalia and anus
- Back and spine
- Hands and feet
- Reflexes

7.6 Kangaroo mother care (KMC) 1 hrs

**Unit 8: Minor Disorder of newborn and their nursing management 4 hrs.**

Common minor disorders of newborn

- Sore buttocks/ Diaper rashes
- Hypothermia
- Skin rashes
- Dehydration fever
- Physiological jaundice
- vomiting ,
- Thrush

- Constipation,
- Swollen breast
- Stuffy nose,
- Pseudo-menstruation
- Pre-deciduous Teeth

**Unit 9: Major disorders and their management** **14 hrs.**

- Asphyxia neonatrum ,
- Respiration distress syndrome
- Meconium Aspiration Syndrome
- Hypoglacemia,
- Hypovolemia
- Neonatal jaundice
- Neonatal sepsis
- Neonatal meningitis
- Neonatal tetanus
- Convulsion
- Omphalitis
- Ophthalmic neonatrum
- Pemphigus neonatrum ( skin infection)

**Unit 10: Care of large and small babies** **5 hrs.**

10.1 Premature baby 1 hrs

- Definition
- Causes and clinical features
- Nursing management
- Complication

10.2 Dismature/ intrauterine growth retardation (IUGR)/ small for date. 2 hrs

- Definition
- Types
- Causes and clinical features
- Nursing management
- Complication

10.3 Post maturity/ heavy for dates/ large or gestational age 2 hrs

- Definition
- causes
- Management

**Unit11: Birth injuries and their management** **5 hrs.**

- Birth injuries
  - Definition, predisposing factors, diagnosis and treatment of
- **Injury to the head**
  - Intracranial injury and hemorrhage
  - Cephalohaematoma
  - Caput succedaneum
  - Scalp injuries
  - Fracture skull

- Injuries to the nerve
- Soft tissue injuries
  - Muscle trauma
  - Trauma to the skin and superficial tissues
  - Injuries to the visceral organs
- Fracture bone

**Unit 12: Congenital anomalies and their management**

**12 hrs.**

12.1 Congenital anomalies	1 hrs
Definition, Causes, Clinical features and, Management	
12.2 Common congenital anomalies of GI system	2 hrs
-Harelip and cleft palate	
-Esophageal atresia / duodenal atresia	
-Pyloric stenosis	
-Umbilical hernia	
-Anorectal malformation (ARM)	
-Omphalocele	
12.3 Common congenital anomalies of nervous system	2 hrs
- Hydrocephalous	
- Anacephaly	
- Microcephaly	
- Encephalocele	
- Spina bifida	
12.4 Common congenital anomalies of genito-urinary system	2 hrs
- Hypospadias and epispadias	
- Undescended testis (cryptorchidism)	
12.5 Congenital anomalies of musculoskeletal system	2 hrs
- Club foot	
- Congenital dislocation of hip	
12.6 Congenital anomalies of Heart	3 hrs
<b>Acynotic heart Disease:</b> Atrial Septal Defect (ASD), ventricular Septal Defect (VSD), endocardial Cushion Defects (ASVD), Patent Ductus Arteriosus (PDA)	
• <b>Cynotic Heart Disease</b>	
- Tetralogy of Fallot (TOF)	
- Transposition of the Great Arteries (TGA)	
- Tricuspid Atresia	
- Truncus Arteriosus not common	
• Chromosome and Chromosomal anomalies	
- Human Chromosome	
- Chromosome abnormalities	
- Down Syndrome (21 Trisomy)	
- Klinefelter Syndrome (47 XXY)	
- Turner Syndrome (45X)	

**Unit 13: Discharge Instructions /counseling**

**3 hrs.**

- Nutrition for mother
- Genital hygiene
- General hygiene

- Breast care/perineal care
- Rest/ sleep
- Family planning
- Postnatal Exercise
- Danger sign of postnatal mother and baby
- Care of baby ( Cleanliness, feeding , protection from infection, accident, warmth and immunization)
- Follow up

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26. Bansal, SC, Nimbalkar SM (2016). Updated neonatal resuscitation guideline 2015- major changes/Indian pediatrics, 53 (15): 403-408
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## **Midwifery - III (Practical)**

Practical: 150 hours (4weeks)

### **Course Description:**

This course is designed to develop clinical skill to care postnatal mothers as well as newborns among students and for the application of the knowledge into practice on the care mother and newborn baby during the postnatal period including assessment /examination of postnatal mother and newborn. It also includes the promotion of breast feeding during the postnatal and providing communication and information to the mother about postnatal care do mothers and newborns at home

### **Objectives**

- Provide care to the postnatal mother and neonate
- Assist mothers to breast feed successfully and to prevent complication
- Demonstrate the ability to manage the minor and major disorders of puerperium
- Demonstrate skill in newborn assessment to detect any abnormalities present.
- Organize health teaching program for mother, family and community for the promotion of health of mother and baby.
- Identify and arrange the equipment needed for the postnatal ward in any situation
- Take appropriate actions in case of emergency situations and abnormal condition.

### **Clinical Experiences**

Clinical experience will take place for a total of 312 hours (8weeks) in postnatal ward students with application of knowledge in practice of Postnatal examination of mother and, care and management in holistic approach using nursing process Student will be supervised full time during the clinical experience.

### **Clinical Activities**

- Postnatal examination of mother
- Newborn examination
- Baby bath
- Peri care
- Breast care and examination
- Daily examination and care of baby
- Communication and counseling of mother and family
- Health Information and documentation

# Gynecological Nursing (Theory)

Theory: 50 hours

## Course Description

This course is prepared to provide knowledge on care and management of women having gynecological problems, which requires immediate interventions in community and hospital setting.

## Course Objectives

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

- Describe various gynecological problems and their physiology, signs, and symptoms, diagnostic investigation and management.
- Explain type of abortions and their management.
- Identify national policies, strategies and legal provision for safe abortion.
- Explain STIs and its management
- Describe the congenital malformation of female genital organs and their management.
- Explain the preventive measures of prolapsed of the pevic organ
- Discuss the menopausal management
- Describe sub-fertility and identify modalities of treatment.

## Unit 1: Human Reproduction

2 hrs

- Review anatomy and physiology of human reproduction system of male and female.
- Human sexuality
- Review Human conception

## Unit 2: Malformations, female Reproductive Organs and Menstrual irregularities and AUB

4 hrs

- Mal-position and malformation
- Abnormal menstrual bleeding (definition, etiology, signs and symptoms, diagnosis, treatment and Nursing Management) of:
  - amenorrhea
  - menorrhoea poly-menorrhoea oligomenorrhoea
  - menorrhoea
  - metrorrhagia
  - dysmenorrhoeal
  - dysfunctional uterine bleeding

## Unit 3: Infection of Female Reproductive System

6 hrs

- Vaginitis
- Vulvitis
- Barthololine cyst and abscess
- Endometritis / endometriosis
- Salpingitis
- Oophoritis

## Unit 4: Bleeding in early pregnancy

6 hrs

- Abortion (MVA, CAC, PAC)

- Ectopic pregnancy
  - Hydatiform mole
  - Erosion of cervix
  - Cervical polyps
- Unit 5: Bleeding in late pregnancy** **4 hrs**
- Antepartum hemorrhage (placenta previa, vasa previa, abruption placenta)
- Unit 6: Pelvic Organ Prolapsed and Genital Fistula** **5 hrs**
- Definition, etiology, signs and symptoms, Dignosis, treatment and Nursing Management of:
    - Cystocele
    - Rectocele
    - Uterine prolapsed
    - Vaginal vault prolapsed
  - Definition, etiology, signs and symptoms, diagnosis, treatment and Nursing Management of Genital Fistula (VVF,RVF,UVF)
- Unit 7: Menopause** **4 hrs**
- Definition, etiology, signs and symptoms of menopause
  - Diagnosis, treatment and Nursing and
  - Management of menopause
- Unit: 8 sexually transmitted infections (review)** **6 hrs**
- Sexually transmitted infection and their management during pregnancy
    - Gonorrhoea
    - Syphilis
    - Hepatitis B
    - Chlamydia
    - Monoliasis, Trichomoniasis
    - HIV/ AIDS
- Unit 9: Reproductive Neoplasm** **6 hrs**
- Neoplasm of reproductive system
  - Benign growths, fibroid
    - Benign tumors; Breast, Uterus, Cervix and Valve
    - Malignant tumors; breast, uterus, cervix and valve
    - Screening of reproductive neoplasum.
- Unit 10: Sub-fertility /Infertility** **2 hrs**
- Problems of sub-fertility/ infertility
  - Male sub-fertility
  - Female sub-fertility
  - Treatment modalities
- Unit 11: Investigations** **5 hrs**
- Preparation of the clients for following investigation
    - Laparoscopy
    - Histero-salpingiography

- High vaginal swab,
- TVS, Pap smear, colcoscopy, endometrium/cervical biopsy, FNAC

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# Gynecological Nursing (Practical)

Practical: 70 hours (2 weeks)

## Course Description

This course enables the student to apply knowledge in order to develop skill and attitude in managing women with the normal and abnormal gynecological conditions health facility and home setting. It will also help to develop competencies in the basic essential competencies care in applying life saving skills.

## Course objective

At the end of this clinic practice, student will be able to:

- assess women to detect normal/abnormal gynecological conditions
- prepare women and family members to ensure healthy reproductive health from childhood to elder age
- teach and counsel the women and family members based on their need to ensure optimal reproductive health of women through lifespan
- provide necessary care and support to women with normal and abnormal gynecological conditions

## Clinical Experiences

Clinical Experience will be a total 70 hours (2 weeks). The students will be able to apply knowledge, skills and attitudes in the care of reproductive age and elderly women on gynecological conditions.

## Clinical activities

- Set up the clinics to assess women in the health facilities.
- Take health history of the women in detail including present and the past history
- Conduct head to toe examination
- Conduct various risk screening tests and programs to assess women (Hemoglobin, blood grouping, RH-typing, Urinalysis (Urine RE/ME, Random blood sugar VDRL, and Others according to facility available).
- High Risk Identification and referral to appropriate centers
- Other condition e.g. HIV infection, Hepatitis B

## Evaluation

- Clinical performance evaluation
- Case study
- Nursing Care Plan
- Log book
- Health teaching

## Final exam

- Viva Voce
- OSPE

# Child health Nursing (Theory)

**Total Hours: 100**

## Course Description

This course helps to describe the child health, specially focusing on the normal growth and development from birth till the adolescent. It is also encouraged the students to focus on the prevention of disease, promotion of growth and development and provide care during the sickness which also includes the family as well in the care of the sick children by using the nursing process.

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

- Describe the concept of child, child health nursing, and roles of child health nurse
- Discuss the process of growth and development of children from neonate to adolescence.
- Explain the measures to promote growth and development of children from neonate to adolescents.
- Identify the different developmental and behavioral problems of children
- Describe the methods of assessing the health status of children.
- Identify the technique of effective communication with different age group children
- Describe the different nursing measures for sick children
- Explain the measures to be taken for reducing morbidity and mortality among children from the major killer diseases.
- Describe the common childhood morbidity conditions and their nursing management.
- Explain the CBIMNCI program and its case management process
- Describe the common stressors of illness and hospitalization of children and the measures to minimize it
- Explain the Identification, first aid measures and preventive measures of the emergency condition among children

<b>Unit 1: Introduction to child health nursing</b>	<b>3 hrs</b>
1.1 Definition of terminology used in child care:	
• Child, neonate, toddler, preschooler, school aged children adolescence pediatrics, pediatrician, pediatric nursing	1hrs
1.2 Historical development of child care at national and international levels	1hrs
1.3 Differences between a child and an adult care	0.5hrs
1.4 Role of nurse in the care of children	0.5hrs
<b>Unit 2: Growth and development</b>	<b>15 hrs</b>
2.1 Concept of Growth and development	4hrs
• Terminology: growth, development, developmental milestone, developmental task	
• Principles of growth and development	
• Factors affecting growth and development	
2.2 Stages of childhood:	2hrs
• Neonate, infancy, toddler, preschooler, school-age and adolescence	
2.3 Major developmental characteristics and milestones of different age groups	2hrs
• Physical , physiological, social, psychological and emotional	
2.4 Developmental tasks	2hrs
2.5 Promotion of growth and development at different age groups	3hrs
• Nutrition, Play therapy/ Early stimulation	

<ul style="list-style-type: none"> <li>• Dental care</li> <li>• Rest and sleep</li> <li>• Immunization, Vaccine preventable disease program</li> <li>• Prevention of accidents</li> <li>• Anticipatory guidance</li> <li>• Child-to-child program, peer education</li> <li>• School health</li> <li>• Sex education</li> <li>• Adolescence friendly health service</li> </ul>	
<b>2.6 Behavioral problems in Children: Temper tantrum, negativism, separation anxiety, sibling rivalry, regression, enuresis, school phobia, recurrent abdominal pain</b>	<b>2hrs</b>
<b>Unit 3: Illness and hospitalization of children</b>	<b>4 hrs</b>
3.1 Stress of illness and hospitalization:	1hrs
<ul style="list-style-type: none"> <li>• Child's reaction to illness and hospitalization <ul style="list-style-type: none"> <li>- according to age group</li> </ul> </li> <li>• Parents and Siblings</li> <li>• Coping mechanism and factors promoting coping</li> </ul>	
3.2 Admission and discharge procedure for sick children	1hrs
3.3 Pain assessment and management in children	1hrs
<ul style="list-style-type: none"> <li>• Expression of pain according to the age group</li> <li>• Pain assessment technique including Pain Rating Scale</li> <li>• Management of pain among various age group children</li> </ul>	
3.4 Pediatric Medication	1hrs
<ul style="list-style-type: none"> <li>• Calculation of medication dosage</li> <li>• Calculation of drops per minute for those who uses micro chamber</li> <li>• Special consideration in pediatric medication</li> </ul>	
<b>Unit 4: Communication with Children</b>	<b>3 hrs</b>
4.1 Importance of good communication and trust in child health nursing	0.5hrs
4.2 Nurse Child parent relationship	0.5hrs
4.3 Methods of communication with children	1hrs
<ul style="list-style-type: none"> <li>• Verbal</li> <li>• Nonverbal: facial expression, body language, posture, eye contact, touch, tone of voice, space and distance, autonomic reaction</li> </ul>	
4.4 Technique of effective communication with children	1hrs
<b>Unit 5: Physical assessments: History taking and physical examination</b>	<b>7 hrs</b>
5.1 History taking	1hrs
5.2 Approaches according to age group for physical examination	1hrs
5.3 Physical assessment (head to toe) with Identifying problems and planning for nursing care	5hrs
<ul style="list-style-type: none"> <li>• Head/chest circumferences</li> <li>• Skin, hair, and nails</li> <li>• Head, eyes, and ears</li> <li>• Mouth, nose and throat</li> <li>• Neck, thorax and lungs</li> <li>• Cardiovascular system</li> </ul>	

- Abdomen
- Musculoskeletal
- Back and extremities
- Genitalia and anus
- Neurological
- Cranial nerve function
- Reflex action

**Unit 6: Community Based Integrated Management of Neonatal and Childhood Illness (CBIMNCI) 6 Hrs**

- The concept of CBIMNCI
- Goals and objectives of CBIMNCI
- Process of screening of childhood diseases/ conditions
- The management of neonatal problems using CBIMNCI guidelines: birth asphyxia, hypothermia, low birth weight and prematurity, jaundice, infection (possible serious bacterial infection),
- The management of childhood illnesses using CBIMNCI guidelines: Acute respiratory infection (Pneumonia, pertussis, diphtheria), diarrheal diseases, measles, malnutrition and malaria
- Role of nurse in reducing mortality & morbidity rate in under five children

**Unit 7: Newborn and Newborn Health Problems 6 Hrs**

- Terminologies
- Extra-uterine adjustment and Physiological changes (review from Maternity nursing)
- Newborn care: immediate after birth (review from maternity nursing), care during 24 hours, care during 28 days
- Common newborn problems and their management: birth asphyxia, hypothermia/hyperthermia, low birth weight and prematurity, jaundice, sepsis
- Neonatal health care strategy and level of neonatal care in health care system of Nepal

**Unit 8: Childhood morbidity condition and their Nursing Management 48 hrs**

**8.1 Common Respiratory Disorders 6 hrs**

- Upper respiratory tract infection: Cold and cough, pharyngitis, laryngitis, epiglottitis, croup
- Bronchitis, pneumonia, PTB
- Bronchial asthma

**8.2 Gastrointestinal disorders 6 hrs**

- Thrush & hare lip and cleft palate, dental carries
- Trachea-esophageal atresia
- Pyloric stenosis
- Hernia: umbilical and inguinal
- Intestinal obstruction, Intussusceptions
- Hirsch prong's diseases
- Ano-rectal malformations
- Diarrhea, dysentery
- Parasitic infestations
- Malnutrition

- Malabsorption syndrome
  - Lactose intolerance
  - Celiac disease (Gelatin enteropathy)

### 8.3 Cardio-vascular and hematological disorders

**7 hrs**

#### 8.3.1 Hematological disorders

- Anemia
  - Iron deficiency
  - Sickle cell
  - Thalassemia
- Leukemia
- Lymphoma: Hodgkin's\non-hodgkins
- Purpura
- Hemophilia

#### 8.3.2 Cardio-vascular disorders

- Congenital heart diseases: cyanotic and acyanotic
- Rheumatic fever/rheumatic heart disease

### 8.4 Genito-urinary disorders

**6 hrs**

- Genitor-urinary malformations: Hydrocele, undescended testis, phimosis, hypospadiasis, epipadiasis
- Glomerulo-nephritis
- Nephrotic syndrome
- Urolithiasis
- Wilm's tumor

### 8.5 Endocrine disorders

**5 hrs**

- Anterior and posterior pituitary disorders:
  - Gigantism (Hyperpituitarism)
  - Dwarfism, diabetes insipidus
- Thyroid disorders
- Cretinism
  - Hypothyroidism (congenital)
  - Hyperthyroidism
- Pancreatic disorder: Juvenile diabetes
- Adreno-cortical disorder: Cushing's syndrome, Addison disease

### 8.6 Neurological Disorders

**6hrs**

- Febrile convulsion, epilepsy
- Meningitis/ Encephalitis
- Head injury
- Mental retardation
- Down's syndrome
- Brain tumor
- Congenital disorders
  - Neural tube defects: Spina bifida, Meningocele, meningocele, anencephaly, encephalocele
  - Hydrocephaly

- 8.7 Musculo-skeletal disorders **4 hrs**
- Club foot and talipes equiovarus
  - Spinal deformity: kyphosis, scoliosis, lordosis
  - Developmental dysplasia of hip
  - Cerebral palsy
  - Muscular dystrophy

- 8.8 Skin, eye, ear, nose, throat and dental disorders **8 hrs**
- Skin disorders:
    - Eczema, rashes
    - Boils
    - Impetigo
    - Cellulites
  - Eye disorders
    - Strabismus
    - Conjunctivitis
    - Stye,
    - Glaucoma
    - Vision defect
    - Xerophthalmia
  - Ear disorders
    - Otitis media
    - Mastoiditis
    - Hearing defect
    - Sinusitis
    - Tonsillitis
  - Dental disorders
  - Malocclusion & Dental caries

**Unit 9: Common emergency conditions** **6 hrs**

9.1 Common emergency condition their first aid measures and prevention **4hrs**

- Falls
- Burns
- Drowning
- Suffocation (Asphyxiation)
- Poisoning
  - Acetaminophen poisoning
  - Petroleum distillate poisoning
  - Corrosive chemical poisoning (Strong acids/alkalis)
  - Lead poisoning (Plumbism)
- Road accident
- Injury from sharp instrument
- Foreign bodies in the ear, nose throat and eye
- Hypothermia

9.2 Cardio-respiratoryarrest; cardiopulmonary resuscitation **2hrs**

**Unit 10: Child and Family with Special Needs** **2 hrs**

- Children with chronic illness and disabilities
- Family facing the unexpected death of a child

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## **Child health Nursing (Practical)**

Total Hours: 140 (weeks)

### **Course Description**

The clinical practice course offers students the opportunity to develop skills and attitudes in the care of new born and children (well or sick). This course also provides opportunity to develop in-depth understanding about the various disease conditions of children.

### **Course Objective**

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

- Perform health assessment to identify the needs and problems of the child and family
- Admit /discharge children by following the hospital rules and policy
- Prepare written nursing care plans according to need of the children
- Provide competent nursing care to the children according to their needs
- Utilize the nursing process to provide need based care with different health problems in different settings.
- Carry out /assist in different pediatric procedure competently.
- Assist parent/care giver in meeting the physical and psychological needs of the children
- Give medication and injection confidently using proper medication (rights) techniques.
- Provide psychological support to the children and their families.
- Apply the concept of integrated management of childhood illness (CBIMNCI) in assessing children with different health challenges
- Give health education to parents/care givers for prevention of diseases and promotion of health of children
- Implement play activities for children of different age groups.
- Prepare case study report of patient according to given guideline

### **Clinical Experience**

Clinical experience will include a total of 165 hours in children hospital/ward(s). Students will apply theoretical knowledge in developing knowledge, skill and attitudes to provide holistic care of children and families competently. This will include using the nursing process to assess, plan implement and evaluate care to children with medical /surgical health problems. Promotion of health and prevention of diseases concept will be adopted and measures will be utilized in pediatric nursing care from infancy to adolescence.

### **Clinical Teaching /Learning Activities**

Each student will perform the following assignments:

- Clinical placement of students in various wards (medical, surgical, emergency, observation, etc.) of the children hospital for 4 weeks
- History taking and physical examination of children
- Carry out admission and discharge of children
- Developing nursing care plan
- Case study and presentation
- Provision of health education to parents/ care givers
- Project work **in** play materials

## Evaluation

- Internal Evaluation 50 marks
  - Daily clinical performance
  - Health teaching
  - Nursing care plan
  - Case study presentation
  - Pediatric specific nursing procedure
  - Toy project
  
- Final Examination 50 marks
  - Practical examination
  - Viva

# Leadership and Management (Theory)

Total Hours: 100

## Course Description

This course is designed to provide the student an opportunity to have a basic foundation of the nursing leadership and management in health care setting. The students are encouraged to explore and have an understanding about the country's health care management so that they develop an understanding of the available resources and how Nepal government is functioning in this area.

## Objectives of the Course

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

- Explain leadership and management process.
- Discuss nurses' roles regarding management in the hospital and community settings.
- Explain the national health care delivery system in Nepal.
- Explain the national health planning in Nepal.
- Discuss personal and professional development.
- Discuss the different professional organization of Nursing
- Identify the conflict management process
- Describe the disaster management process, principles
- Explain the problems in hospital and community setting and their solution.

## Unit 1: Introduction to Leadership and Management

**8 hrs**

- |   |      |
|---|------|
| 1.1 Definition of terminologies: Organization, administration, management, manager, leadership and leader | 1hrs |
| 1.2 Principles of management  | 1hrs |
| 1.3 Functions of management   | 1hrs |
| 1.4 Leader and Leadership   | 5hrs |
| • Types of leadership   |      |
| - Autocratic  |      |
| - Democratic  |      |
| - Laissez-faire   |      |
| • Leadership Theory   |      |
| • Qualities of good leader  |      |
| • Factors affecting leadership  |      |
| - Cultural-social background  |      |
| - Education   |      |
| - Experience  |      |
| - Social, political and economical environment  |      |
| • Society's demand for certain types of leadership  |      |

## Unit 2: Management Process

**24 hrs**

- |                               |       |
|-------------------------------|-------|
| 3.1 Review of Nursing Process | 1hrs  |
| 2.2 Management Process        | 1hrs  |
| 2.2.1 Assessment              | 6 hrs |
| • Client's needs and problems |       |
| - Urban and rural situation   |       |
| • Staff needs and problems    |       |

<ul style="list-style-type: none"> <li>- Staff strengths and limitations</li> <li>• Physical resources of the unit               <ul style="list-style-type: none"> <li>- Material equipment and supplies (logistic management)</li> <li>- Maintenance equipment and materials</li> </ul> </li> </ul>	
2.2.2 Planning	6 hrs
<ul style="list-style-type: none"> <li>• Prioritize needs and problems</li> <li>• Set goals,</li> <li>• Plan distribution of work activities, scheduling of staff</li> <li>• Assignment of client care and other activities</li> <li>• Method of assignment: Functional method, Team method (nursing), Patient- centered method (case management method)</li> </ul>	
2.2.3 Implementation	8 hrs
<ul style="list-style-type: none"> <li>• Nursing records and reports</li> <li>• Data management</li> <li>• Organizational communication: Definition, methods, Process, Barriers (problems) in management</li> <li>• Morale: Definition, methods to enhance morale</li> <li>• Job satisfaction: ways to increase job satisfaction</li> <li>• Motivation: Definition, types, methods of motivating staffs               <ul style="list-style-type: none"> <li>- Recognition and reward</li> <li>- Responsibility and accountability</li> </ul> </li> <li>• (Staff development program )In- service education programme               <ul style="list-style-type: none"> <li>- Purposes</li> <li>- Components</li> <li>- Division of work</li> </ul> </li> <li>• Delegation of responsibility</li> <li>• Co-operation, co-ordination and facilitation</li> <li>• Supervision: Definition, types and importance</li> <li>• Monitoring</li> <li>• Meeting: Definition, types, process and writing minuting</li> </ul>	
2.2.4 Evaluation	4 hrs
<ul style="list-style-type: none"> <li>• Definition</li> <li>• Types</li> <li>• Purposes and importance</li> <li>• Methods of evaluation</li> <li>• Who and what to evaluation               <ul style="list-style-type: none"> <li>- Client's satisfaction</li> <li>- Staff's performance satisfaction</li> </ul> </li> </ul>	
<b>Unit 3: Nursing Professions</b>	<b>10hrs</b>
3.1 Definition and its criteria	1hrs
3.2 Different trends, strengths and short comings of nursing profession in Nepal	1hrs
3.3 Various regulatory bodies to strengthen nursing profession: Introduction, Structure, Function, Policies, Rule and Regulations, Controlling mechanism of following:	6 hrs
<ul style="list-style-type: none"> <li>• Nepal Nursing council (NNC)</li> <li>• Nursing Association of Nepal (NAN)</li> </ul>	

<ul style="list-style-type: none"> <li>• Professional organization (e.g. MIDSON)</li> <li>• International council of Nursing (ICN)</li> <li>• International council of midwifery (ICM)</li> <li>• Various regulatory mechanisms used in Nepal</li> </ul>	
3.4 Responsibility for personal and professional growth	2 hrs
<ul style="list-style-type: none"> <li>• Professional correspondence <ul style="list-style-type: none"> <li>- Letter of application</li> <li>- Letter of acceptance</li> <li>- Letter of resignation</li> </ul> </li> </ul>	
<b>Unit 4: Conflict Management</b>	<b>4 hrs</b>
4.1 Definition	0.5hrs
4.2 Causes	0.5hrs
4.3 Types of conflict	2hrs
4.4 Principles of conflict management	1hrs
4.5 Process of conflict management	1hrs
<b>Unit 5: Management in relation to delivery of health services</b>	<b>12 hrs</b>
5.1 Definition of organogram	3hrs
5.2 Organizational structure and function of government health services	3hrs
<ul style="list-style-type: none"> <li>• Before federal system in Nepal <ul style="list-style-type: none"> <li>- Health post/ primary health care center</li> <li>- District hospital, zonal and regional hospitals</li> </ul> </li> <li>• Organizational structure after federalism <ul style="list-style-type: none"> <li>- Health post, Janata swasthya kendra, primary hospital, secondary hospital, tertiary hospital, specialized hospital and academia.</li> </ul> </li> </ul>	
5.3 Co-operation/collaboration and functions of different developmental partners in Nepal, Policies, rules and regulation in delivering the health services	6 hrs
<ul style="list-style-type: none"> <li>• Multilateral organizational: WHO, UNICEF, UNFPA, WFP</li> <li>• Bilateral agencies: DFID, GIZ, USAID, JICA, KOICA, One heart worldwide (OHW), JSI, Plan international Nepal, Population Service International/Nepal (PSI/Nepal), Wateraid Nepal, Marie Stopes International (MSI)</li> <li>• International non-governmental organization: BNMT, ADRA Nepal, CARE Nepal, FHI, Helen keller International, World vision international Nepal (WVIN), Save the children, United Mission to Nepal (UMN)</li> <li>• Non-governmental organizations: Red Cross Society. Paropkar, nepali Technical Assistance group (NTAG), Nick Simons Institute (NSI), Sunaulo pariwar Nepal, Nepal CRS company, Family planning association of Nepal (FPAN)</li> </ul>	
<b>Unit 6: National health planning/policy (Latest)</b>	<b>24hrs</b>
6.1 Health plan (targets, indicators, strategies and achievement)	12hrs
<ul style="list-style-type: none"> <li>• Current National Health Policy</li> <li>• Nepal Health Sector Strategy (NHSS)</li> <li>• National Nursing and Midwifery Policy</li> <li>• Public health act</li> <li>• Nepal health service act, 2053</li> </ul>	

- Nepal health service regulation, 2055
  - Second long term health plan
- 6.2 Job descriptions of nurses and other personnel 12 hrs
- Chief hospital/community nursing administrator
  - Hospital/community nursing administrator
  - Nursing /community nursing officer
  - Midwifery officer
  - Staff nurse/Public health nurse (different areas)
  - Auxiliary nurse midwife (hospital and health post)
  - Health Assistant
  - Medical Officer
  - Staff nurse (PHCC and hospital)
  - Regional Public Health Nurse
  - District public health nurse
  - Village/JAHW health worker
  - Maternal child health worker (MCHW)
  - Auxiliary health worker ( AHW)
  - Lab technician / Lab assistance
  - Female community health volunteer (FCHV)
  - Nayab subba
  - Kharidar
  - Bio-medical technician
  - Medical recorder

- Unit 7: Organizational change and change management** **4 hrs**
- Definition
  - Forces for change
  - Process of change management

- Unit 8: Information and data management: Process and its presentation in health system**
- HMIS 4 hrs
  - DHIS
  - IMIS
  - TMIS
  - LMIS

- Unit 9: Health care social security/ Health insurance** **2 hrs**
- Concept
  - Policies and strategy
  - Implementation

- Unit 10: Disaster management** **6 hrs**
- Definition
  - Disaster management cycle
  - Role of nurses in different cycle
  - Disaster/mass casualty management plan

## References

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# Leadership and Management (Practical)

Total Hours: 342

## Course Description

This course provides opportunity to the students to work as an Incharge of the unit/ward to hospital as well as community health facilities (Janta Swasth Kendra and local level health institutions according to Federal structure) in order to develop management skills.

## Course Objectives

### Ward Management

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

- Assess, plan and implement beside nursing care according to needs of clients in the hospital.
- Maintain good interpersonal relationship, co-operation and co-ordination with different categories of health care staff and departments.
- Assign the daily work to the staff and students.
- Supervise the junior students and auxiliary staff who are working with them in the ward.
- Maintain weekly /monthly supplies according to the needs of the unit.
- Identify the administrative problems in a unit and try to solve them in an effective manner with co-operation and co-ordination of the health team members.

### Community Health Nursing Administration

- Identify the structure and functions of central to grass root level health services.
- Identify the health needs of the individual clients
- Maintain good interpersonal relationship with health team member.
- Supervise the work of the health workers in the health posts and clinic.
- Identify the administrative problems at district and health post level and try to solve them in an appropriate manner by mobilizing community recourses.
- Assign daily work to the staffs and students.
- Give planned in service education to health care staff according to their need.

### Unit 1: Management practicum

- 4 weeks in hospital
- 4 weeks in community (2 weeks birthing center, 1 week institutional visit, 1 week in PHC)

### Assignment:

- Assign the staff and clients need problems
- Plan routine work in a ward/unit

### Responsibilities

- Act as a student incharge in the ward and take full responsibilities for one shift under supervision/guidance.
- Take night report hand over of equipment and supplies, including drugs
- Visit patient: bed to bed
- Delegate and explain staff responsibilities
- Prepare for doctor's round
- Check all required articles and supplies
- Check charts in order
- Maintain cleanliness of ward/unit

### **Record and Report**

- Maintain good communication with staff and clients.
- Transfer doctor's order.
- Write daily reports.
- Send slips to different departments as necessary.
- Take and give ward's report.

### **Supplies and equipment**

- Check supplies and equipment.
- Order supplies required .
- Make list of supplies.

### **Supervision and teaching**

- Supervise auxiliary staff and junior students in ward/unit
- Give one health teaching to the clients.
- Guide them as necessary.

### **Observation visit: need to update as per current health structure**

- Zonal hospital
- District hospital.
- Department of health.
- Central health.
- Community development health project in district.

### **Center to peripheral level activities**

- Organogram of Ministry of health to sub health post.
- Identify different activities of health manpower.
- Plan work schedule at district/health post level.
- Identify administrative problems and make alternative solution.
- Staff problem.
- Supply and equipment problem.

### **Communication problems**

- Delegation problem.
- Problem of accepting responsibility.
- Budget.
- Observe the supervision of health workers and teaching.  
Auxiliary nurse midwife  
Junior auxiliary health worker  
Female community Health volunteer peon

### **Participation**

- Participate in mobile clinic.
- Identify health needs of the clients.
- Utilize local/community resources while taking care of the clients.
- Utilize the change process in order to improve the situation
- Plan health teaching for selected community health worker
- Participate in school health programme
- Analyze and present data on MCH activities.

**In service education**

- In service education.
- Set objectives
- Plan and implement
- Select date time and place
- Health worker
- Select topic/ subject matter
- AV aids
- Physical set up