

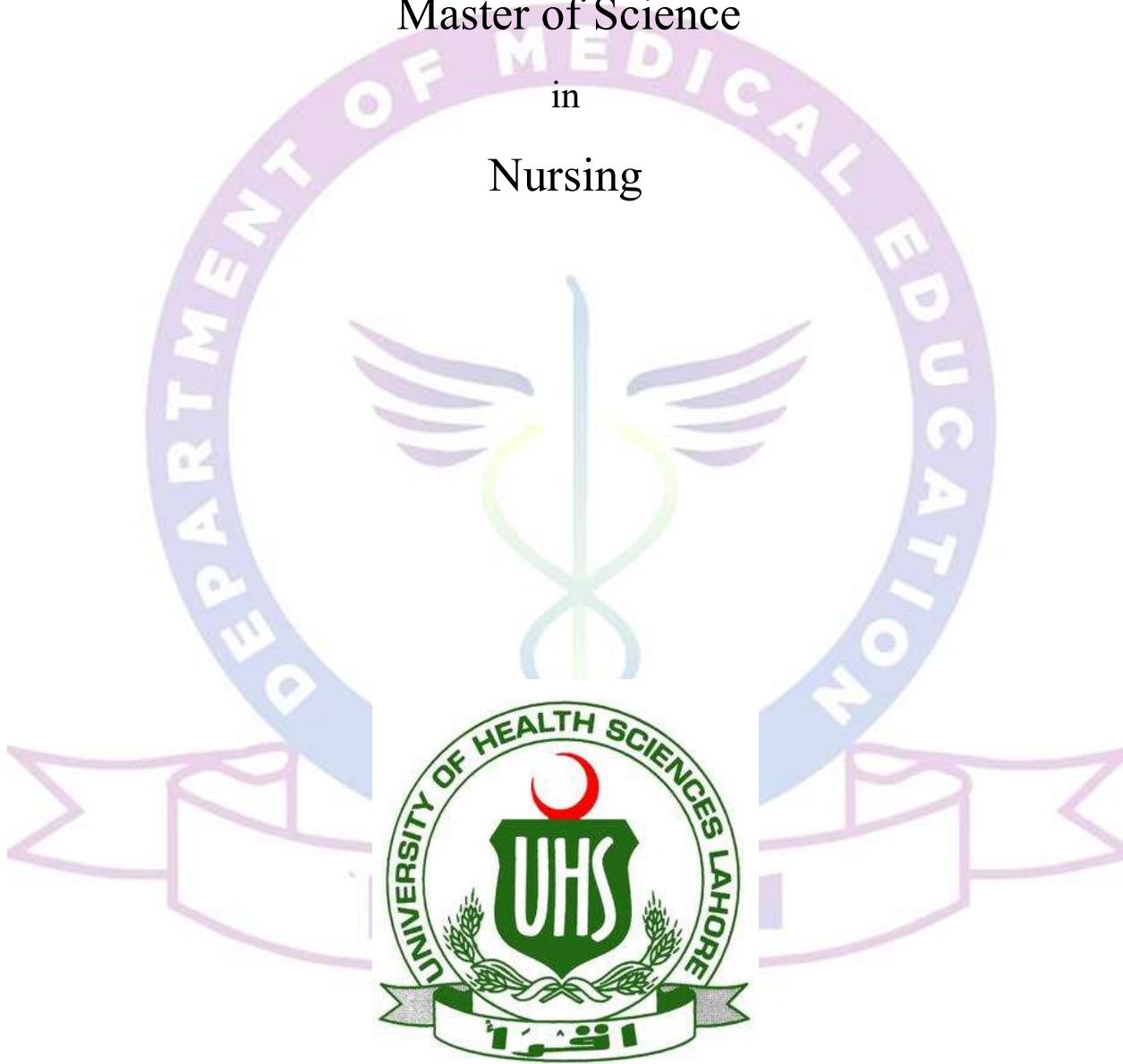
COURSE OF STUDIES

for

Master of Science

in

Nursing



UNIVERSITY OF HEALTH SCIENCES, LAHORE PAKISTAN

Program Rationale:

The Masters of Science in Nursing program has its purpose in the preparation of graduate level nurses capable of practicing as administrators or advanced practice nurses in a variety of health care settings, to strengthen an area of practice, to apply theory to practice, to apply legal and ethical practices, to apply meaning and understanding in practice and to develop skills of inquiry.

Mission Statement:

The mission of Institute of Nursing is to create leaders of nursing and equip them with intellectual, social, scientifically sound and skills for inter-disciplinary role as clinicians, researchers and administrators. It will impart high quality nursing education at parity with international standards through creation and integration of knowledge from research, education and practice.

Program Educational Objectives:

Master of Science in nursing Program is based on following objectives;

1. To prepare the students effectively in advance nursing practice, integrating them with the art and science of nursing into the advance nursing role.
2. To act as an effective leader, role model, and advocate for clients in clinical practice and in education.
3. To synthesize advanced knowledge of the social, political, ethical, technical, cultural, spiritual, environmental, and economic factors influencing the health care system and higher education

4. To integrate the knowledge of theory and research in advance nursing areas.
5. To demonstrate accountability and responsibility in developing advanced nursing roles.
6. To investigate scientifically the issues relevant to advanced nursing education and nursing practice.
7. To evaluate personal achievements, professional growth and excellence in practice.
8. To pursue of doctoral education in nursing.

Program Learning Outcomes:

At the completion of the program the graduate, will: articulate and model personal philosophy of nursing that is consistent with nursing theory, ethics and professional standards.

- Collaborate with the client, family, communities, and health care providers to promote, maintain, and restore health across the life span.
- Apply knowledge of liberal arts, sciences, nursing theories, educational theories, and frameworks to the advance nursing role.
- Utilize and disseminate research in nursing practice.
- Use a variety of communication skills and information technology to provide health care and education within multiple settings.
- Provide leadership to effect improvements in health care and nursing education through integration of the nursing discipline with liberal arts and sciences.
- Utilize skills to improve standards of care for clients, nurses, students and other professionals, communities, and society.
- Evidence a commitment to professional growth and lifelong learning.
- Construct a foundation for the pursuit of doctoral education.
- Apply principles in decision making, critical thinking and independent judgment to the role of the advance practice nurse.

SCHEME OF STUDIES (2-Year)

4 semesters

MS/MPhil Nursing

Semester #	Course Code	Course Title	Credit Hours		
			Theory	Practical	Total
1st Semester					
1	Core Courses	Research Methodology & Biostatistics	2	0	10
		Theoretical Basis of Nursing	2	1	
		Nursing Leadership and Management	2	1	
		Academic Writing	2	0	
2nd Semester					
2		Advanced Health & Clinical Assessment	2	1	9
		Advanced Pathophysiology	2	1	
		Advanced Clinical Pharmacology	2	1	
3rd Semester					
3		Acute Symptoms Management	2	1	9
		Thesis	0	6	
4th Semester					
4		Clinical Practicum	0	4	9
		Nursing Education	2	1	
		Professional and Teaching Skills Apprenticeship (PTSA)	0	2	
(Total CH=37)					

Course Title: MS Nursing

Course Duration: 24 Months

Basic Rule:

1 Theory credit hour=1 hour/week/semester

1 Lab credit hour=3 hour/week/semester

1 Clinical credit hour= 3 hour/week/semester

Contact Hours:

Theory =288

Practical = 912

Total = 1200

Credit Hours:

Theory $18*(16 \times 1) = 288$

Practical $19*(16 \times 3) = 912$

Total = 37

Course Outline:

Outline of Topics/Syllabus

First Year Semester I- Core Courses

1. MS- NU 505 – Research Methodology & Biostatistics 2 CH

Sr. No	Theory 2 CH
Unit 1	Designs of quantitative research (Observational & Experimental) Purposes of research design in quantitative studies Specific types of quantitative research - surveys, evaluations, outcome research
Unit 2	Research control - controlling external factors - controlling intrinsic factors Internal and external validity
Unit 3	Designs of qualitative research – characteristics of qualitative research, design and planning of qualitative research, phases in qualitative study, features of qualitative design
Unit 4	Research Process - Scrutinizing research problems, questions & hypotheses - Scrutinizing data collection methods, evaluating measurements and data quality

	<ul style="list-style-type: none"> - Analyzing qualitative data & quantitative data - Discussion and dissemination of research findings - Critique of quantitative & qualitative research papers
Unit 5	<p>Introduction to statistics</p> <ul style="list-style-type: none"> - Variables & their types, measurement scales, types of data - Data collection <p>Descriptive statistics</p> <ul style="list-style-type: none"> - Presentation of data, measures of central tendency, measures of dispersion) <p>Inferential statistics</p> <ul style="list-style-type: none"> - T-test, Z-test, F-test, ANOVA, chi-square test, Linear Regression & Correlation and their applications) <p>Sampling Techniques</p> <ul style="list-style-type: none"> - Sampling, Sample size calculation, Random & Non Random Sampling, Sampling Error, - Sample Size, and Questionnaire Design. <p>Introduction to statistical package(SPSS)</p>

Outcome:

- The students are expected to learn research in nursing as a tool in improvement of nursing skills.
- The students are expected to practice evidence base nursing care
- To enhance critical thinking and decision making in terms of nursing assessment, monitoring and evaluation of patient care.

Suggested reading:

Essentials of Nursing Research – Methods, Appraisal and Utilization, 5th ed., Lippincott, Denise F. Polit, Cheryl Tatano Beck, Bernadette P. Hungler

Burns, N. and Grove, S.K.. Understanding nursing research-eBook: Building an evidence-based practice. Elsevier Health Sciences.

Biostatistics for medical, nursing and pharmacy students, A. Indrayan, L. Satyanarayana

Methodological references Substantive references

UHS

2. MS-NU 501 – Theoretical Basis of Nursing

3 CH

Sr. No	Theory 2 CH	Practical 1 CH
Unit 1	Introduction to Nursing Theory <ul style="list-style-type: none"> - Components of theory - Theoretical framework - Types & Uses of theories - Nurses as scholars Barriers and resources to theory development	Develop Schematic models
Unit 2	The Concept of Nursing Theory – Towards a clearer understanding of the concept of nursing theories <ul style="list-style-type: none"> -Concept of borrowed and unique theory Theories of nursing; Nightingale Lininger, Pender, Kolcaba, Mercer, Mischel, Orem, King, Roy's theories, and their applications	Case Study
Unit 3	Philosophy, Science and Nursing <ul style="list-style-type: none"> - Introduction - Philosophy of science in nursing - Knowledge development and nursing science Perspective on Knowing: A model of nursing knowledge—Novice- Expert	Reflective writing
Unit 4	Theory Analysis and Evaluation <ul style="list-style-type: none"> - Theory evaluation criteria - Synthesized method for theory evaluation - Theory description, analysis, and critique 	Group Assignment: Critique on a theory.
Unit 5	Application of Theory in Nursing Practice, Research & Education <ul style="list-style-type: none"> - Relationship between theory and Practice - Types of practice theories needed in the discipline of nursing - Relationship between theory and research - Relationship between theory and education Relationship between theory and administration and management	Identify the theory-practice gap through a case study.

Outcome:

- The student is expected to critique and apply the above theories in nursing administration, clinical set-up, and nursing education.

Suggested reading:

Theoretical basis for Nursing, 5th ed. Wolters Kluwer, Melanie McEwen. Evelyn M. Wills.

Theoretical Nursing – Development & Progress, 3RD and 4th ed., Lippincott William & Wilkins, Afaf Ibrahim Meleis

3. MS-NU 507 – Nursing Leadership & Management

3 CH

Sr. No	Theory 2 CH	Practical 1 CH
Unit 1	<p>Nursing Leadership & Management</p> <p>Leader and leadership</p> <ul style="list-style-type: none"> - Definition and function of leader and leadership - Role of leader - Leadership process - Leadership styles <p>Manager and Management</p> <ul style="list-style-type: none"> - Definition and function of Manager and Management - Principles of Management - Role of manager - Management functions - Planning - Organizing - Staffing/Scheduling - Directing - Controlling 	<ul style="list-style-type: none"> - Role play by using multiple leadership styles in different situations <ol style="list-style-type: none"> 1. Work plan sheet 2. Prepare an organizational chart of hospital/nursing services 3. Creating a staffing schedule(roster) 4. Role play to direct nursing students (conducting mock interviews) 5. Prepare audit sheet/Performance appraisal sheet
Unit 2	<p>Financial Management</p> <ul style="list-style-type: none"> - Define financial management - Balancing costs and quality - Basics and Types of Budget - Steps of budget formation 	<ul style="list-style-type: none"> - Formation of the budget proposal for a specific department
Unit 3	<p>Managing and Improving Quality</p> <ul style="list-style-type: none"> - Total Quality Management - Continuous Quality Management - Components of Quality Management - Six Sigma and Lean Six Sigma 	<ul style="list-style-type: none"> - Mock activity on Plan-Do-Check -Act (PDCA) cycles - Conducting mock audits - Formation of incident report

	<ul style="list-style-type: none"> - Program Evaluation and Accreditation - Conflict management - Risk management 	
Unit 4	<ul style="list-style-type: none"> - Key Skills in Nursing Management - Critical Thinking - Decision Making - Types of Decision-making - Decision-making Process and techniques - Problem Solving - Problem-solving methods - Problem-solving Process 	<ul style="list-style-type: none"> - Role play on decision-making by using Specific techniques according to the situation

Outcome:

- The students are expected to adopt nursing policies and procedures.
- The students will be able to understand laws and jurisprudence pertaining to nursing practice.
- The students will be able to understand the related theories about Nursing Management and leadership and apply them in their work.

Suggested reading:

Leadership role and management function in nursing theory and application, Bessie L. Marquis and Carol J. Huston 7th edition

Effective Leadership and management in Nursing Eleanor J. Sullivan 8th Edition

4. Academic Writing

2 CH

Course Description: This course develops students' skills in producing clear, well-structured academic papers, focusing on critical thinking, argumentation, and research.

Course Objectives:

- Understand academic writing conventions
- Develop critical reading and writing skills
- Structure and organize academic papers
- Improve grammar, punctuation, and style
- Conduct academic research and cite sources
- Plagiarism and writing ethics

Suggested reading:

Academic writing., Jeffrey r wilson

Year One-Semester II

1. MS-NU 503 – Advanced Health & Clinical Assessment

3 CH

Sr. No	Theory 2 CH	Practical 1 CH
Unit 1	<p>The Nursing Health History</p> <ul style="list-style-type: none">- Components of Nursing Health History- Nursing Diagnoses (all Body Systems) and Nursing Care Plan	<ul style="list-style-type: none">- Make nursing care plan
Unit 2	<p>Skin, Hair, and Nail Assessment</p> <ul style="list-style-type: none">- subjective and objective data focus questions- objective data assessment techniques- skin inspection and palpation- scalp inspection and palpation- nail inspection and palpation	
Unit 3	<p>Head, Neck, and Cervical Lymph Node Assessment</p> <ul style="list-style-type: none">- subjective and objective data focus question- face and neck Inspection- face and neck palpation,- trachea/thyroid/lymph node palpation	
Unit 4	<p>Mouth, Nose, and Sinus Assessment</p> <ul style="list-style-type: none">- subjective and objective data focus questions- inspection of mouth, nose and sinus- Palpation and Percussion of sinuses	<ul style="list-style-type: none">- Perform health assessment of all body systems.- Identify normal and abnormal findings of all body systems.
Unit 5	<p>Eye Assessment</p> <ul style="list-style-type: none">- subjective and objective data focus questions- external eyes inspection (eyelids/lashes)- eye functioning test (visual acuity, peripheral vision- accommodation- extraocular movements- response to light, abnormal eye movement <p>Ear Assessment</p> <ul style="list-style-type: none">- subjective and objective data focus questions- inspect external ear (size, shape, lesion, discoloration)- palpate external ear (mastoid process – tenderness, temperature, edema)- inspect auditory canal with otoscope (cerumen,	

	<p>appearance, tenderness),</p> <ul style="list-style-type: none"> - inspect tympanic membrane with otoscope (color, consistency, landmarks) - assess auditory function (gross hearing ability, lateral sound, comparison of air conduction) 	
Unit 6	<p>Thoracic and Lung Assessment</p> <ul style="list-style-type: none"> - subjective and objective data focus questions - <u>Inspection</u> (lateral, posterior, and anterior thorax – color, intercostal spaces, chest symmetry, respiration, shape/position of sternum, chest expansion) - <u>palpation</u> (palpate the thorax – sensation, vocal/sound, thoracic expansion) - <u>percussion</u> (resonance, diaphragmatic excursion bilaterally) - <u>auscultation</u> (breath sounds, altered voice sound) 	
Unit 7	<p>Cardiac Assessment</p> <ul style="list-style-type: none"> - subjective and objective data focus questions - <u>inspection</u> to identify landmarks and any abnormal pulsation - <u>palpation</u> (aortic area, pulmonic area, tricuspid area, mitral area), - <u>percussion</u> – to define cardiac borders and area of the - <u>auscultation</u> (heart sound, rate/rhythm) 	
Unit 8	<p>Abdominal Assessment</p> <ul style="list-style-type: none"> - Subjective and objective data focus questions - <u>Inspection</u> - skin color, venous pattern, skin integrity, umbilicus, surface motion, symmetry, contour - <u>Auscultation</u> - bowel sounds, vascular sounds - <u>Percussion</u> - all four quadrants, liver area, spleen area - <u>Palpation</u> - all four quadrants – tenderness, consistency, masses, kidneys, abdominal girth 	
Unit 9	<p>Musculo-Skeletal Assessment</p> <ul style="list-style-type: none"> - Subjective and objective data focus questions <ul style="list-style-type: none"> - Inspection of gait - Inspection and palpation of spine, shoulder, posterior iliac crest - Palpation and inspection of head, neck, facial structure, muscle development, inspect and palpate upper and lower extremities, 	

	<ul style="list-style-type: none"> - Inspect for range of motion 	
Unit 10	<ul style="list-style-type: none"> - Neurological assessment - subjective and objective data focus questions - mental status assessment - appearance & movement - observe mood - feelings, expressions, thought process, perceptions, clarity. - cognition/level of consciousness, memory, abstract reasoning - ability to identify similarities, sensory perception, and coordination. - cranial nerve assessment (sensory, motor, and mixed) - reflexes assessment – voluntary movements, deep tendon reflexes, bicep reflex, triceps reflex, patella reflex, Achilles reflex, Babinski reflex, decortication, decerebration 	

Outcome:

- The students are expected to perform and apply nursing health assessments with regards to patient care, to formulate nursing diagnoses, and identify health problems.

Suggested reading:

1. *Nurses' Handbook of Health Assessment*, 4th ed., Lippincott, Janet R. Weber
2. *Bickley, Lynn S. (2003). Bates' guide to physical examination and history taking*. Philadelphia: Lippincott Williams & Wilkins,

2. MS-NU 509 – Advanced Pathophysiology

3 CH

Sr. No	Theory 2 CH	Practical 1 CH
Unit 1	Concepts of Health and Disease <ul style="list-style-type: none"> - Disease etiology, clinical manifestation - Acute & chronic Inflammation - Cell Injury, causes and its types 	
Unit 2	Hematopoietic Function <ul style="list-style-type: none"> - Hematopoiesis - Red cell metabolism, oxygen transport. - General aspects of anemias - Iron deficiency anemia, B12, folate deficiency anemia. - Anemias of chronic disease. Congenital and acquired hemolytic anemias, anemias-due to reduced red cell production (Sickle cell anemia and thalassemia), aplastic anemia - White blood cells, normal range, neutrophilia and neutropenia, eosinophilia. - Introduction to ABO blood groups, transfusion reactions and management of acute hemolysis. 	Interpretation of Complete Blood(CBC).
Unit 3	Cardiovascular System <ul style="list-style-type: none"> - Alteration of cardiac function - Identify the signs, symptoms, and nursing Management of pericardial effusion, stable & unstable angina, myocarditis, infective endocarditis, aortic valve stenosis & regurgitation, MI, Coronary artery diseases Congestive heart failure. - Hypertension – Types of hypertension, physiologic changes in hypertension, complications, physiologic basis of treatment 	1. Perform Electrocardiography 2. Interpretation of Electrocardiogram
Unit 4	Respiratory System <ul style="list-style-type: none"> - Epidemiology, pathophysiologic changes in the lungs, clinical picture/symptoms, physiologic basis of treatment of Tuberculosis, Pneumonia, Chronic obstructive pulmonary disease and Lung cancers. 	Interpretation of Arterial Blood Gases
Unit 5	Skeletal and Muscular System <ul style="list-style-type: none"> - Etiologic factors, pathophysiologic mechanism, clinical picture/symptom, physiologic basis of treatment of Rheumatoid arthritis, Osteo arthritis, Ankylosing Spondylitis 	

Unit 6	Gastrointestinal and Hepatic disorders <ul style="list-style-type: none"> - Pathophysiologic process, clinical picture/symptoms, physiologic basis of treatment of Gastroenteritis, Peptic Ulcer, Irritable Bowel Syndrome, Hepatitis A, B, C & E. 	Health education plan
Unit 7	Disorders of Brain Function <p>Pathophysiologic process, clinical picture/symptoms, physiologic basis of treatment for</p> <ul style="list-style-type: none"> - Cerebrovascular disease, Different types of Stroke (brain attack) and aneurysms. - Seizure disorders – Generalized convulsive status epilepticus – etiology, physiological changes, clinical picture/symptom, physiologic basis of treatment. 	Case study

Outcome:

- The students are expected to relate medical diagnosis into the formulation of nursing process.

Suggested reading:

Pathophysiology – Concepts of Altered Health States, 6th ed., Carol Mattson Porth

Advanced Pathophysiology – Application to Clinical Practice, Lippincott, Maureen Groer

3. MS-NU 611 – Advanced Pharmacology

3 CH

Sr. No	Theory 2CH	Practical 1CH
Unit 1	Pharmacokinetics <ul style="list-style-type: none"> - Routes of drug administration - Absorption of drugs - Bioavailability of drugs - Volume of distribution - Drug metabolism - Drug elimination - Kinetics of continuous administration 	Dose Calculation according to different age, weight, gender and race.
Unit 2	<ul style="list-style-type: none"> - Laws relating to drugs - Local regulation of drugs – Pakistan 	Follow SOP,s

Unit 3	Drug receptor interaction and pharmacodynamics - Chemistry of receptors and ligands - Major receptor families: ligand gated ion channels G protein coupled receptors enzyme linked receptors intracellular receptors - Dose response relationship: graded dose response relations - potency, efficacy, drug receptor binding, relationship of binding effect, agonists, antagonists, functional antagonism, partial agonist - Quantal dose response relationship: therapeutic index - determination of therapeutic index	Calculate therapeutic index of high risk medicines. Calculate loading and maintenance dose of different drugs Calculate Half-life of drugs.
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Outcome:

- The students will learn to collate the clinical impact & effect of drugs in nursing process and to understand the process/regimen of medical treatment that is incorporated with nursing diagnosis and plan of care.

Suggested reading:

Drug Therapy in Nursing, Lippincott, Diane S. Aschenbrenner, Samantha J. Venable

Basic & Clinical Pharmacology, 9th ed., Katzung G.

Journals on Clinical Pharmacy/drug trial research publications

Year Two-Semester III

1. Thesis

6 CH

The student will do an in-depth study of a topic of their own choice other than listed in the syllabus. The supervisor, Institutional Review Board (IRB) and Advance Studies and Research Board (ASRB) of University of health sciences Lahore, must approve the project/thesis.

Final presentation must be evaluated/graded by the thesis/project committee

Sr. No	Theory 2 CH	Practical 1 CH
Unit 1	Respiratory system <ul style="list-style-type: none">Nursing care and management of patients with acute respiratory distress syndrome (ARDS), pneumothorax, pleural effusion, pulmonary embolism, asthma, and exacerbations of chronic obstructive pulmonary disease (COPD).	<ul style="list-style-type: none">Prepare Case Study
Unit 2	Cardiovascular system: <ul style="list-style-type: none">Hemodynamic monitoring and basic interpretation of common arrhythmias (sinus bradycardia, sinus tachycardia, premature ventricular contractions, atrial fibrillation, ventricular fibrillation, ventricular tachycardia, and supraventricular/paroxysmal supraventricular tachycardia).Nursing care of patients with congestive heart failure (CHF), myocardial infarction (MI), stable and unstable angina, and pre- and post-coronary artery bypass grafting (CABG)	<ul style="list-style-type: none">Develop NCP
Unit 3	Nervous system: <ul style="list-style-type: none">Management of neurological symptoms (seizures, strokes)	<ul style="list-style-type: none">Assessment of level of consciousness by using GCS
Unit 4	Gastrointestinal system: <ul style="list-style-type: none">Management of gastrointestinal symptoms (nausea, vomiting, acute abdomen diarrhea, Electrolytes imbalance)	<ul style="list-style-type: none">Develop ORS composition chart
Unit 5	Integumentary System <ul style="list-style-type: none">Management of Pressure ulcersManagement of burn patients (1st, 2nd and 3rd degree)	<ul style="list-style-type: none">Calculate Total Burn Surface Area using the rule of ninesAssessment of risk of pressure ulcer by using Braden Scale

Outcomes:

- These outcomes aim to equip students with the knowledge, skills, and critical thinking abilities necessary to provide effective nursing care plan with acute emergency condition.

Suggested reading:

Nursing Intervention for the Critically Ill, Shuva Das Gupta

Critical Care Nursing – A Holistic Approach, 8th ed., Patricia Gonce Morton, Dorrie K. Fontaine, Carolyn M. Hodak, Barbara M. Gallo

Year Two-Semester IV

1. MS- NU 614 – Clinical Practicum for Clinical Nursing

4 CH

In clinical practicum, the students are expected to perform the procedures stated in Health Assessment and Acute Symptoms Management.

- The students must perform with a mentor
- The students are expected to present a report regarding “Related Learning Experience” two times per month during the period of practicum.
- The student can also perform any procedures other than stated in the syllabus

NOTE:

ALL PROCEDURES PERFORM MUST USE NURSING PROCESS/CARE PLAN MAPPING TO ENHANCE CRITICAL THINKING AND NURSING CLINICAL DECISION.

2. MS-NU Nursing Education

3 CH

Sr. No	Theory 2CH	Practical 1CH
Unit 1	Philosophical foundations of Education <ul style="list-style-type: none">- Idealism- Realism- Naturalism- pragmatism	
Unit 2	Educational theories: <ul style="list-style-type: none">- Theories of learning; Skinner and Thorndike, Bandura's, Robert Gagne, Gardner's theory of multiple intelligence, Ausubel's assimilation theory	Prepare: <ul style="list-style-type: none">• Lesson Plan• Unit Plan• Master Plan• Academic Calendar
Unit 3	Teaching learning process <ul style="list-style-type: none">- Management in the teaching-learning process- Factors influencing learning- Domains of learning Cognitive, Affective, Psychomotor	Develop curriculum
Unit 4	Concepts on curriculum development <ul style="list-style-type: none">- Introduction to curriculum development- Types of curriculum- Principles of curriculum construction- Factors influencing curriculum development.- Models of curriculums- Stages and levels of curriculum planning- Phases of curriculum process	Construct: <ul style="list-style-type: none">• MCQs (25)• SEQs (10)
Unit 5	Course planning <ul style="list-style-type: none">- Introduction to course planning- Master planning- Unit plan- Daily lesson plan	

Unit 6	Teaching strategies & methods - Introduction - Classification of teaching strategies - Methods of teaching used in nursing.	
Unit 7	Educational evaluation in nursing - Definition of evaluation - Purposes of evaluation - Evaluation process - Types of evaluation • Formative & summative evaluation • Selecting an evaluation instrument(s)	

Outcomes:

- Effective teaching strategies and methods are crucial in nursing education to ensure that students acquire the necessary knowledge, skills, and attitudes for professional practice.

Suggested reading:

Nursing Education, BT Basavanhappa, Jaypee Brothers

Nursing Education Journal

3. Professional and Teaching Skills Apprenticeship (PTSA) 2 CH

