



الجامعة الوطنية - السودان
National University - Sudan

M.Sc. Medical Surgical Nursing







Introduction

The Master of Science in Medical-Surgical Nursing prepares nurses for advanced clinical practice in the care of patients with medical and surgical conditions. The program develops specialized knowledge, critical thinking, leadership, and research skills to ensure the delivery of safe, evidence-based, and high-quality patient care.

Medical-Surgical Nurses play a key role in patient assessment, care planning, treatment administration, patient education, monitoring of health status, prevention of complications, and coordination with multidisciplinary healthcare teams.

Graduates of the program are equipped to provide advanced nursing care, contribute to healthcare improvement, and lead professional nursing practice in diverse clinical settings.

General objective

Bridge the gap in qualified staff in the field of Medical Surgical Nursing.

Specific objectives

Qualify a critical mass of medical-surgical nurses to:

- Identify and solve problems in the area of medical-surgical nursing

- Collect, interpret and synthesize information related to critical conditions settings: urgent, emergency and intensive care
- Provide professional quality standard surgical nursing services in emergencies and disaster situations
- Abide by the set ethical principles and legal professional practices
- Integrate specific knowledge to Optimize actions for prevention and best treatments to attain best results
- Acquire scientific basis for actions in medical-surgical nursing
- Implement evidence-based practices

Expected learning outcomes

Upon completion of the M.Sc. medical-surgical nursing programme, successful graduates should be able to:

- Knowledge & Understanding
Demonstrate advanced evidence-based knowledge in medical-surgical nursing, research, and nursing management.
- Intellectual/Cognitive Skills
Apply critical thinking , clinical decision-making , problem-solving, and research appraisal to manage complex health condition
- Practical/Professional skills
Deliver safe, ethical-patient-centered, evidence-based nursing care, conduct research, and demonstrate leadership and effective communication within multidisciplinary healthcare teams.

Admission requirements

Applicants must satisfy the Regulations of the Ministry of Higher Education and Scientific Research and the General Regulations of the Faculty of Graduate Studies and Scientific Research of the National University-Sudan for registration for Master Degrees

Eligible candidates are holders of:

- B.Sc. (Honors) Nursing with grade Good (Second Class-Division

Two) minimum or GPA ≥ 2.5

- B.Sc. (Honors) Nursing with grade Pass (Third Class) in addition to a qualifying of 12 credit hours
- B.Sc. (General) Nursing in addition to Postgraduate Diploma in Nursing
- License Sudanese National Council for Medical and Health Professions

Award of the Master Degree in Nursing

Eligibility

to be eligible for the award of Master Degree in Nursing, a student must have completed the specified duration of the program and fulfilled all the requirements established for each course within the respective program

Study program

Study Programme Plan

Semester One

Contact Hours / Week		Credit Hours	Arabic	Course
Practical	Theory			
-	2	2(2+0)	التفكير الناقد وحل المشكلات	NUR-611 Critical Thinking and Problem Solving
2	1	2(2+1)	الاحصاء الصحي	NUR-612 Health statistics
6	2	4(2+2)	التمريض الباطني العام	NUR-613 General Medical Nursing
6	2	4(2+2)	التمريض الجراحي العام	NUR-614 General Surgical Nursing
14	8	12(8+4)		Total

Semester Two

Contact Hours/Week		Credit Hours	Arabic	Course
Practical	Theory			
-	2	2(2+0)	مناهج البحث العلمي	NUR-621 Research Methodology
2	1	2(1+1)	المعلوماتية في التمريض	NUR-622 Nursing Informatics
-	2	2 (2+0)	التمريض المبني علي الأدلة والبراهين	NUR-623 Evidence Based Nursing
-	2	2 (2+0)	تعليم المهن الصحية	NUR-624 Health Profession Education
6		3 (1+2)	طوارئ التمريض الباطني	NUR-625 Emergency Medical Nursing
6	2	3 (1+2)	طوارئ التمريض الجراحي	NUR-626 Emergency Surgical Nursing
14	9	14(9+4)		Total

Semester Three

Contact Hours/Week		Credit Hours	Arabic	Course
Practical	Theory			
-	2	2 (2+0)	الإدارة والقيادة في التمريض	NUR -631 Management and Leadership
6	2	4 (2+2)	التمريض الباطني الحرج	NUR-632 Critical Medical Nursing
6	2	4 (2+2)	التمريض الجراحي الحرج	NUR-633 Critical Surgical Nursing
6	0	6(0+6)	بحث التخرج	NUR-634 Dissertation
18	6	16(6+10)		Total

Courses Contents

NUR -611 Critical Thinking and Problem Solving

Definition of critical thinking, steps, elements, characteristics, importance, purpose, basic principles of Critical Thinking; Skills enhance ability of criti-

cal thinking to solve a problem; Types of thinking skills to solve the problem ;Techniques of critical thinking to solve the problem ;Clinical reasoning, methods and steps to improve critical thinking skills; Criteria of good critical thinking questions to solve the problem ;Evaluate Information ;Test critical thinking to solve a problem; Problem Solving and Implementation of critical thinking in nursing practice to solve the problem.

NUR-612 Health Statistics

Describing numbers; Idea to improve the value of numbers ; Adapting the numbers; Using numbers to answer questions and Use of statistical methods in psychology and education:

NUR-613 General Medical Nursing

Nursing Process Guides the Introduction of Skills of Development ;History Taking and Physical Examination ;Indications, Purposes, Preparation, Pre and Post Procedure Care in common Laboratory Tests ; Introduction: Scope of medical nursing practice, Different nursing care settings, Current concepts of care and advancement in field of Medicine Causes, Pathophysiology, investigations, clinical features and management of common problems of Cardiorespiratory system ; Gastrointestinal system ; Endocrine system ;Renal system ;Central nervous system and Problems of blood and blood forming organs: Anemia, polycythemia, bleeding disorders, Leukemia, Lymphomas, SLE.

NUR-614 General Surgical Nursing

Introduction: Scope of Surgical nursing practice; Different nursing care settings, Current concepts of care and advancement in field of Surgery.

Causes, Pathophysiology, investigations, clinical features and management of common problems of : Musculo- skeletal system ;Sensory problems ;Cardio-respiratory system ;Gastrointestinal system; Endocrine system ;Renal system and Central nervous system.

NUR-621 Research Methodology

Definition, characteristics, purposes, kinds of research ;Review of Literature ; Research problem; Sampling; Tools and methods of data collection; Implementing research plan

And Analysis and interpretation of data.

Practice: Developing and presenting research proposal

NUR-622 Nursing Informatics

Module 1: Introduction to Informatics; Module 2: Electronic Records; Modules 3: Nursing Practice Applications; Modules 4 :Informatics in Nursing Education and Informatics in Health Care Research.

NUR-623 Evidence Based Nursing

Introduction to evidence based practice :Definition evidence-based practice (EBP) and steps of EBP; Asking the Clinical Question :Identifying the Problem and PICOT format.

Construct a PICOT format question; Components of an answerable and searchable question

Searching Evidence: Databases that guide healthcare literature, sources of internal and external evidence; Valuating the Evidence: Strength of evidence definition, Judgments of the quality and usefulness of evidence; Evaluating Outcomes; Define outcome management and evidence sources to measure outcomes.

NUR-624 Health Profession Education

Nursing Educational; Curriculum Development: Definition, design, Components, types, process and steps of curriculum development, Formulation of philosophy and objectives; Teacher preparation: Teacher roles and responsibilities, functions, characteristics, competencies, qualities, Preparation of professional teacher; Examinations design: Types of examination question: Good

criteria and uses of various types of examination questions ; Multiple choice and Health Education: Aim, Definition, Importance of health education.

Barriers to effective health education and Modern strategies of implementing effective health education

NUR-625 Emergency Medical Nursing

Introduction: Historical Perspective, Scope of Critical Care Nursing; Anatomy and Physiology of Vital Organs / Systems: Brain, Heart, Lung, Kidney, Endocrine glands, Pancreas and Liver; Emergencies of Respiratory System; Management of patients with Cardiovascular Emergencies;

Diagnosis and Management of cardiovascular emergencies; Emergencies due to Multisystem Organ Failure: Emergencies of Multisystem Organ Failure (MSOF); Diagnosis and Management of Emergencies of Multi System Organ Failure; Renal Emergencies; Diagnosis and Management of Renal Emergencies; Neurological Emergencies; Diagnosis and Management Neurological Emergencies; Gastro-intestinal Emergencies; Diagnosis and management of G I emergencies; Endocrine Emergencies and Diagnosis and management of Endocrine Emergencies.

NUR-626 Emergency Surgical Nursing

Introduction: Historical Perspective, Scope of Critical Care Nursing: Legal and Ethical Issues and Principles of Critical Care Nursing ; Anatomy and Physiology of Vital Organs / Systems;

Emergencies of Respiratory System; Management of patient with Cardiovascular Emergencies;

Diagnosis and Management of cardiovascular emergencies; Emergencies due to Multi System Organ Failure: Emergencies of Multi System Organ Failure ; Diagnosis and Management of Emergencies of Multi System Organ Failure; Diagnosis and Management of Genitourinary Emergencies; Neurological Emergencies; Diagnosis and Management of Neurological Emergencies; Gastro-intestinal Emergencies; Diagnosis and management of G I emergencies;

Ophthalmic Emergencies; Diagnosis and Management of Ophthalmic Emergencies.

NUR-631 Management and Leadership

Introduction: Concept, aims, objectives, theories, and principles of management; Management theories; Management functions and attributes necessary for effective management and Principles and theories of management applied to nursing services and nursing education ; Roles and functions of nurse manager in planning; Roles and functions of nurse manager in organizing and Organizational behavior.

NUR-632 Critical Medical Nursing

Planning and organization of critical care units: Evolution of critical care unit: objectives, criteria for selection of patients , Critical care environment, Organization of critical care units-design, staffing, equipment, Ethical and Legal issues in critical care, psychosocial considerations for patients and families; Pharmacological Management; Anatomy and physiology of vital organs/ systems (Brain, Heart, lung, kidney, endocrine glands, pancreas, liver etc.); Causes, Pathophysiology, investigations, clinical features and management of acute / multi system organ failure conditions/emergencies: Septic shock, DIC, trauma, burns, drug overdose, poisoning and drowning; Nursing care of patient in renal dialysis unit: acute and chronic renal Failure , dialysis modalities , fluid and electrolyte complication ; Management of medical emergencies Such as hemorrhagic acute pancreatitis, hepatic encephalopathy, and Severe Diabetic Ketoacidosis

NUR-633 Critical Surgical Nursing

Planning and organization of critical care units: Evolution of critical care unit, objectives, criteria for selection of patients in critical care unit; Critical care environment; Organization of critical care units-design, staffing, equipment; Ethical and Legal issues in critical care, psychosocial considerations for patients and families; Special technologies and equipment and drugs; Teaching and counseling in-service education; Role of advanced practitioner in intensive

nursing care; Nursing care for all ages ; Potential and actual surgical health complex alterations in the following systems: Nervous, Cardio-vascular, Endocrine ,Respiratory and Gastro- intestinal.

NUR 634 Dissertation

Write a research proposal; Conduct research: Research methodology, Data collection and management, Interpretation of results, Prepare a dissertation document; Preliminaries: Title Page, Abstract, Acknowledgement; Introduction; Literature review and Results, Discussion; Conclusions and Recommendations ;References and Appendices if need be.

Human resources and facilities

Teaching Staff

- One Associate Professors
- Four Assistant Professors
- Four Lecturers

Facilities

- One Lecture Room = 100 Seats
- One Skills Laboratory = 100 Seats
- University Main Library = 400 seats
- Tow Computer Laboratories = 240 Seats
- E-library = 50 seats

Programme Duration

- Three Semesters = 42 Credit Hours

Teaching Modules

- Lectures
- Seminars
- Small Groups Discussions

- Tutorials
- Assignments
- Practical's

Teaching Language

- English

Examinations Regulations: Procedures and Conditions

- Students must abide by Examinations Rules set by the Faculty Graduate Studies and Scientific Research of the National University-Sudan
- Student completed a course but was unable to sit for its examination for acceptable reason shall be allowed a substitute examination
- Medical reports are not accepted unless approved by the Medical and Health Services of El-Ragi Teaching Hospital
- The medical report should be submitted to the Programme Coordinator, within the seven days following the date of the examination
- Medical reports are not accepted if a student sat for the examination
- Student submitted a medical report is not allowed to sit for the examinations during the period covered by the medical report and if sat the results will be canceled
- The pass mark for any course is 60% and student must succeed in both theoretical and the practical components of each course separately
- A student missing an examination without acceptable reasons will be assigned failure in the concerned course (s)
- Student has the right to:
 - » Sit for supplementary examinations in no more than 1/3 of the number of courses
 - » Re-sit for the examination in all courses if failed in more than 1/3 to 1/2 of the number of courses
- Student failing in more than 50% of the courses of a semester shall be discontinued
- Student failing in a supplementary examination of one or more courses in either of the semesters prior to the last one shall be discontinued

- Student failing in a supplementary examination of one or more courses in the last semester shall be allowed extra chances to re-sit for examination(s) within the double period allocated for the programme
- Supplementary examinations convene after the final examinations of each semester

Assessment

- Continuous assessment 40%
- Final examination 60%: 40% Theory + 60 % OSCE

Grading System

A+ (90-100) A (80-89) B+ (75-79) B (70-74) C+ (65-69) C (60-64) F (<60)

Award of the Degree

The Scientific Council of the National University-Sudan, based on the recommendation of the Board of the Faculty of Graduate Studies and Scientific Research, shall award the successful candidate:

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