



TEHRAN UNIVERSITY
OF
MEDICAL SCIENCES

School of Nursing and Midwifery



M.Sc. in Medical-Surgical Nursing

(General specifications, plans, and headlines)

Section I

Title: Medical-Surgical Nursing (M.Sc.)

Degree: M.Sc.

Introduction

Providing nursing services is one of the burgeoning demands in the developing Iranian society. The development of the society, population increase, previously recognized issues, and the emergence of recently revealed health problems are among the elements that require full realization and improvement in providing adult health care system. As far as the adult population is the main driving force of economic and social growth, their good health bolsters the social affluence while their poor health deteriorates that affluence by imposing health costs on society. Drawing attention on nurses' indispensable contributions to the adult health care system and the increasing demands for professional nursing services, nursing postgraduate studies with special reference to providing high-quality adult-care services, ranging from primordial prevention to rehabilitation, are deemed inevitable nowadays. Throughout this program, the aspired approach is to train efficient human resources to provide clinical and private nursing care services in terms of humane and ethical relations while they retain the required skills for adult health issues such as surgical and medical ones. Accordingly, the revision commission of Medical-Surgical Nursing has held several meetings at the Supreme Council for Planning of Medical Sciences to formulate the program with respect to scientific trends as well as the concurrent needs of the society. In the formulation of the program, it is aspired to retain nursing care framework, compare the program to the culture of the society, merge the theory with clinical practice, employ nursing models, and improve professional ethics as well as training proficient and industrious students to provide satisfactory services.

Definition

Medical-surgical nursing is a nursing specialty area concerned with training well-educated, knowledgeable, and efficient nurses deeply committed to taking care of patients suffering from

surgical and internal issues. The applicants will employ approaches such as evidence-based care, client-centered care, holistic and community-based care with regard to ethics and humane interaction to identify the needs of clients and, consequently, offer professional cares concerning tertiary prevention stages.

The Aim of the Course

Vision

Within ten years, the country will have attained a significant position in the region with respect to training principles, research products, and providing nursing services.

Mission

The purpose of the program is to train proficient, knowledgeable, committed, ethically aware, and responsible nurses who apply tenets of critical thinking and evidence-based nursing practice to help the clients in health centers, clinics, and rehabilitation centers.

Values and Beliefs

In outlining this program the following principles have been highlighted:

- Human beings are deemed as the successor to God and they attain grandeur, dignity, and elevated stature, and they are granted with the right of taking care of their health.
- Giving credence to scientific authority and making efforts to obtain knowledge and rationality are highly valued beliefs in nursing.
- Nursing is committed to reach justice and equality both in health system and medical training, and every given undertaking to reach this end is appreciated.
- Making progress and considering social justice in offering health care services to meet the biological, mental, social, cultural, and spiritual needs is highly regarded.
- Disease and disability prevention and health improvement in all aspects will be taken into consideration in this program.
- Participating in training and making decision on health-related issues are the inevitable rights of the clients.

- Providing comprehensive and socially committed nursing care in order to improve health care services will be modified in accordance with the latest technological, social, and cultural trends.
- The training strategy will be drawn up and based upon the applicants' requirements.
- Nursing training program will be developed in a manner to help applicants achieve creativity, efficiency, self-confidence, and self-sufficiency in knowledge production.
 - The dominant training strategy is to permanently bolster trainees' autonomy in learning.
 - The employment of innovative training methodologies is highly aspired in this program.
 - The graduates of this program will make use of their capabilities to evaluate, improve, and flourish the nursing profession and, consequently, become responsible, efficient, and conscientious individuals in their position.

General Competencies

- Competencies (establishing ethical communications with clients, colleagues and students)
- Interaction between sections (establishing effective organizational communications with the health team members)
- Training the patients, their families, and students
- Research (producing and conducting research project within the field of adult health)
- Critical thinking (evaluating adult health services at micro and macro levels)
- Writing academic papers (relating to adult health services)
- Problem-solving skills (identifying and resolving adult health issues at different levels of the society)
- Working at professional sections related to adult health services, e.g., a hospital, nursing home, etc.
- Managerial skills (planning, organizing, assessing the leadership, and directing the issues associated with adult health system)
- Evidence-based decision making (making use of research evidence in improving adult health)
- Planning, monitoring, observing, and evaluating the programs related to adult health
- Quality control procedures in adult health service centers
- Creating a physically and mentally wholesome work environment
- Making use of the available equipment and facilities in adult health service centers
- Professionalism

- Lifelong self-improvement
- Receiving and offering counseling

Specific Competencies and Skills

Caregiving:

- Maintaining an effective communication with patients and their families as well as the members of the health team
- Collaborating and assisting with the members of the health team
- Offering comprehensive health-based nursing services with respect to patient-centered and family-centered approaches
- Providing specialized evidence-based nursing services for patients suffering from acute and chronic diseases as well as those who are disabled or semi-disabled
- Checking and finding patient's issues and his family, prioritizing the issues, presenting nursing solutions, and evaluating the solutions
- Tracking the patient's health status and interacting with their family, offering special nursing cares, and training the required skilled to be employed at home
- Collaborating with the members of the health care group
- Comply with the ethical code and respecting the patient's rights and their family

Training

- Training the patient, their family, and the community on the three levels of prevention
- Making use of the latest trends in training process
- Employing the latest scientific and educational methods to improve nursing care services in health and related specialized areas
- Providing content and educational software
- Assessing the needs, planning, and presenting training courses (retraining and on-the-job training) in accordance with the nursing staff needs

- Collaborating with medical schools in clinical education of students doing their B.Sc. degrees
- Providing clues and guidance with clinical expertise for the nursing students

Research

- Collaborating with health system officials in conducting researches and carrying out and developing the findings
- Studying the background and condition of research work, developing appropriate plans, and presenting them to the health officials
- Employing the new technologies in applied research within various fields of adult health
- Publishing and presenting the conducted research results to health officials
- Participating in the development of population laboratory to provide direct services for the targeted community
- Participating in the development of research and development centers in the areas of prevention, treatment, and rehabilitation of adults

Counseling

- Provide advice to the patient, their family, and community on the three levels of prevention
- Referring the patient and their family to clinicians in the case of a clear need for specialized clinical services

Diagnostic (Monitoring)

- Reviewing and identifying individuals' needs, families, and the society regarded as a client
- Identifying the patient's health problems and reporting them to the specialist in charge

Prevention

- Reviewing and identifying potential problems in adult health, and providing evidence-based coping strategies and referring them to the officials in charge
- Participating in screening programs of the health system

Productive

- Producing knowledge and technology in the field of adult health

- Producing and introducing local nursing care patterns according to the cultural norms of the Muslim community
- Producing patterns and training packages for students, workers, and colleagues
- Producing research tools and variables related to adult health

Management

- Tracking, evaluating, and prioritizing problems in adult care system and referring them to the officials in charge
- Evaluating the ethical challenges, sketching plans to develop professional ethics, and delivering the plans to the related officials
- Assessing the quality of delivering health care services with respect to the available criteria and evidence to possibly reformulate or modify the services
- Participating in the development and rightsizing the standards in accordance with the needs of society and the latest scientific trends
- Formulating and employing prevention strategies for health issues in the relevant areas
- Performing the role of clinical governance

The Terms and Conditions of Admission to the Course

- Participating in the national master's entrance exam and becoming qualified
- Holding a B.Sc. degree in nursing received either in Iran or abroad

Number	Title	Multiplier
1	Medical-Surgical Nursing	5
2	Community Health Nursing	3
3	Mental Health and Psychiatric Nursing	2

4	Pediatric Nursing	1
5	Obstetrical Nursing	1
6	General English	2
Total		14

Note: Further information regarding the evaluation of academic degrees or changes in exam materials and their assumed multipliers are detailed in the pamphlet of medical sciences M.Sc. entrance exam published annually.

Educational Strategies, Methods, and Techniques

Educational Strategies: task-based learning blended learning (teacher-centered and student-centered), blended learning (attendance and DLN), problem-based learning, professional competency-based learning, and evidence-based learning

Methods and Techniques: lecture (question and answer, video clip), journal club, case presentation, discussions in small groups, seminars and conferences, site visits (for example, Nursing Office of the Tehran University of Medical Sciences, and Iranian Nursing Organization), and clinical and managerial practice in health care fields

Student Assessment

Written assessment [multiple choice questions (MCQ), essay (restricted and extended answer)], oral assessment (unstructured and structured oral exams), interactive computer test, and practical assessment (projects, portfolio, and logbook, laboratory observations).

Numbers and Types of Credits and Tables of the Courses

Prerequisite courses: 4 credits

Core Courses: 28 credits

Dissertation: 4 credits

Total Number of Credits: 32

Course code	Course title	Credits					Total hours					Requirement
		theoretical	practical	practicum	internship	total	theoretical	practical	practicum	internship	total	
01	Advanced statistics and research methodology	2	1	-	-	3	34	34	-	-	68	-
02	Information technology in health care system	0.5	0.5	-	-	1	8	17	-	-	25	-
Total credits 4		2.5	1.5	-	-	4	42	51	-	-	93	-

Code of course	Course title	Credits				Requirement
		Theory	Practical	Placement	Total	
04	Nursing theories and models and their application	1.5	0.5	-	2	-
05	Management of clinical nursing services	1	-	0.5	1.5	Nursing theories and models and their application
06	Client education methods	1	0.5	-	1.5	

07	Specialized Pharmacology	1.5	-	-	1.5	
08	Pathophysiology	1.5	-	-	1.5	
09	Monitoring adults' health	1	-	1	2	
10	Nursing of acute medical surgical disorders and diseases	1.5	-	1.5	3	07,08,09
11	Nursing of chronic medical surgical disorders and diseases	1.5	-	1.5	3	07,08,09
12	Complementary medicine, alternative Medicine, and the role of nurses	1	-	0.5	2	07,08,09
13	Passive defense and the role of nurse	0.5	-	-	0.5	07,08,09
14	Oncology Nursing	0.5		1	1.5	07,08,09
15	Palliative care and the role of nurses	0.5	-	0.5	1	07,08,09
	Dissertation	4	-	-	4	
	Internship	-	-	6	6	

Dissertation Defense

The student and the thesis committee are required to comply with the guidelines of the School of Nursing and Midwifery with regard to the presentation of the thesis and meeting the deadlines for graduation. During the viva, the jury committee will thoroughly examine the student's knowledge in the related area of the research.

Ethical issues

The graduates should:

- Observe the Patient's Bill of Rights¹ when working with the patients.
- Strictly observe Biosafety and Patient Safety Rules* concerning the patients, personnel and workplace.
- Observe the Rulebook for Dress Code².
- Strictly observe the Regulations of Working with the Laboratory Animals³.
- Carefully preserve resources and equipment.
- Truly respect faculty members, the staff, classmates, and other students as well as creating a cordial and respectful atmosphere.
- Observe social and professional ethical considerations in constructive criticism.

1, 2, and 3 are contained in the Enclosures.

* Biosafety and Patient Safety Rules will be set out by the educational departments and will be available to the students.

Section II

Title of the course: Medical Information Systems

Code of the course: 01

Number of credits: 1 Unit

Prerequisite: -

Type of the course: Theoretical 0.5 unit

Practical 0.5 unit

Course description

During this module, the training of the basics of computer together with the required applications to use a database in both offline and online modes will be met. Additionally, applicants will receive adequate training in analyzing and submitting data in the domain of nursing management.

Main topics

Theoretical 0.5 unit (17 hours)

Practical 0.5 unit (9 hours)

*Getting to know the personal computer

- Understanding PC hardware components and accessories
- Understanding the function and importance of PC hardware components and accessories

*Operating and launching the Windows operating system

- Getting to know the of sophisticated operating systems especially Windows
- Features and specifications of the Windows operating system
- Knowing how to use Windows help
- Launching diverse interactive appreciations (Microsoft Word, PowerPoint, Access, Excel, etc.)

Getting to know data base systems and applications relevant to the field of study

- Understanding the terminology of information science
- Knowing how to search and use reference book data stored on compact disks

- Getting to know data base systems such as Medline, Embase, Biological Abstract and the way they should be explored
- Getting to know and search full-text academic journals stored on compact disks

Understanding the Internet

- Getting to know information networks
- Getting to know several web browsers and their extensions
- Learning how to adjust a browser to connect to the Internet
- Acquiring the necessary skills for doing scientific search on major search engines
- Having knowledge of popular and educational website related to the field of study

Principal references:

1. Lambert, Jill. *Finding Information in Science, Technology and Medicine*, Taylor & Francis
2. Krzysztof Zielinski and et al. *Information Technology Solutions for Healthcare*. The latest edition

Student assessment practices

- **Cognitive field:** Assessment is conducted through written exam given twice at the middle and end of terms.
- **Psychomotor field:** Students will be practically assessed by means of checklists against their ability to use a computer and Windows operating system together with searching the Internet.

Title of the course: Advanced Research Methods and Statistics

Code of the course: 02

Prerequisite: -

Number of credits: 3 units

Type of the course: Theoretical 0.5 unit – Practical 0.5 unit

Principal objective(s) of the course

The students are required to master descriptive – analytic statistics to set up a research project and apply the results of the formerly conducted investigative studies.

Course description

In this module principles of research methodology, setting up a research project, and principles of evaluating research projects will be reviewed. Students will learn how to cope with the issues surrounding them via scientific methods, and, consequently, will be able to look for new horizons to resolve the issues.

Main topics (68 hours)

I. Theoretical, 2 units (24 hours)

• First section: Statistics

- An overview of measurement scales (nominal - rating - interval - ratio)
- Measures of central tendency in descriptive statistics (mean, mode, median)
- Index of dispersion in descriptive statistics (standard deviation, standard error, variance)
- An overview of hypothesis testing
- Understanding type I and type II errors and calculating P-value with confidence interval
- Understanding statistical test to compare two or more groups making use of the available qualitative and quantitative data (chi-square test, McNemar's test, Wilcoxon signed-rank test, Kruskal–Wallis one-way analysis of variance, paired t-test)
- Sample size determination making use of software
- Calculating sensitivity and specificity

• Knowing how to use SPSS

- Defining and working with files
- Importing and editing data
- Exporting and importing files in SPSS

- Searching amounts, variables, and rows
- Creating variables in SPSS
- Working with graphs and variables
- Conducting the required tests, statistical analysis such as T-test, χ^2 , and Reg. correlation

Section two - Research methodology

- An overview of the principles of research methodology
- Understanding research (history, definitions, types of quantitative studies, selecting the subject)
- Theoretical assumptions framework; reviewing the studies and making use of references
- Aims, questions, hypotheses, assumptions, and limitations of the research
- Methodologies and their components (community, the sample and sampling, research environment, variables and their calculating scales, data collection methods, the validity and reliability of tools, displaying the results, data resources, statistical methods for data analysis, ethics in research)
- Drawing conclusion and discussing the proposition for applying the findings in researches in the future
- An overview of qualitative research
- Ways of conducting a research
- Promoting research utilization in improving nursing services

II. Main topics

Theoretical, 1 unit (24hours)

- Statistical calculations based on hypothetical data or data from a study
- Working on a research project

Principal references

1. Wood, GT, Harber, J. *Nursing Research: Method, Critical Appraisal Utilization*. The latest edition. Mosby, Elsevier.
2. Deniz, F. Polit, B. *Nursing Research*. The latest edition
3. Various books and journals in the field of nursing research

4. Mohammad K, Nehapetian V, Malekafzali H. *Statistical Methods and Health Indices*. The latest edition.
5. Daniel, Wayne W. and Chad L. Cross. *Biostatistics: A Foundation for Analysis in the Health Sciences*. The latest edition.
6. Other sources confirmed by the lecturer

Student assessment practices

Theory

- Active participation in the class
- Midterm and final examination
- Students' participation in class management (giving seminars)
- Evaluating the two researches

Practice

Delivering a conducted written research study

Title of the course: Nursing and Professional Communications Ethics

Code of the course: 03

Prerequisite: -

Number of credits: 1.5 units

Type of the course: Theoretical 1 unit – Practical 0.5 Unit

Course description

This module provides theoretical principles and necessary skills for taking moral actions in nursing cares as well as establishing professional communications in terms of human values. In this module, applicants will learn how to support the clients and their families' rights together with the ways of developing moral actions in the nursing areas. Besides, the essence of nursing ethics, ethical theories, ethical aspects of taken actions, and nursing professional communications will be discussed. During the classes, applicants will grow insightful with respect to nursing ethical issues, and will analyze the ethical decision making to fortify their moral authority.

Principal objective(s) of the course:

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

1. Elaborate on historical foundations and principles of nursing ethics.
2. Elaborate on principles of bioethics and its applications in nursing.
3. Explore and analyze diverse ethical viewpoints in nursing profession.
4. Explain the ways of ethical decision making in various disciplines of medical sciences with respect to human relationships.
5. Participate in discussions related to ethical decision making while taking care of the clients.
6. Elaborate on the mechanisms of enhancing ethical action taking.
7. Grow insightful with respect to ethical issues.
8. Remain committed to support clients' rights.
9. Evaluate their ethical perspectives as well as the work environment.
10. Evaluate moral values and human dignity in the work environment.

Main topics: 34 hours

I. Theoretical, 1 Unit (17 hours)

1. The definition of nursing ethics and its significance
2. Spirituality and ethics
3. Health and spirituality
4. Human dignity and moral values of Islam
5. The history of nursing and human communication ethics
6. Principles of bioethics (autonomy, benefiting, preventing damage and loss, justice)
7. Moral sensitivity to the nursing training
8. Physician-patient-nurse communication model
9. Principles of decision making in dealing with nursing professional issues with respect to ethical perspectives
10. Ethics of nursing laws
11. Recognizing fundamental human rights and having respect for clients' rights
12. Professional nursing responsibilities based on ethics
13. Ethical issues in taking care of vulnerable groups
14. Codes of ethics and professional guides
15. Professional ethics in health system
16. Moral and legal issues in nursing (professional misconduct, negligence, etc.)
17. Employing ethical fundamentals and showing respect for human and professional values in providing specialist care for critically ill patients and their families

II. Practice

- Giving written and oral reports about the challenges of nursing ethics as well as professional nursing relationship in a clinical nursing care section
- Offering solutions based upon codes of ethics

Principal references:

1. The Holy Quran

2. Nahj-al Fesaha
3. Nahj al-Balagha
4. Imam Ja'far al-Sadiq, *Treatise of al-Huquq (Rights)*
5. Al-Kulayni and Muhammad ibn Ya'qub. *Al-Kafi (The Sufficient Book)*. Tehran: Dar al-Kotob al-Islamieh, 1985
6. Bihar al-Anwar
7. Misbah Yazdi, Muhammad-Taqqi. *Philosophical Instructions*. Tehran: Islamic Development Organisation Press, 1985.
8. ---. *In Search of Islamic Mysticism*. Qum: Imam Khomeini Education and Research Institute Press, 2008.
9. Larijani, Bagher. *Essentials of Medical Ethics*. Vol. 1 and 2 Tehran: Baray-e-Fards, 2003.
10. Damari, Behzad. *Mental Health*. Tehran: Tib va Jame'eh Publication, 2009.
11. Tabatabaei, Muhammad-Husayn. *Shiite Spirituality*. Qum: Shiite Publication, 1975.
12. Motahari, Morteza. *Spiritual freedom*. Tehran: Sadra Publication, 1981.
13. Bolhari, Jafar. *Research Topics and Common Research Areas in Psychology, Psychiatry, and Religion*. Tehran: *Aindishe va Rafter*, Vol 9&10, 1997.
14. Ashrafi, Mansour. *Medical ethics and professional misconduct*. Tehran: Iran University of Medical Science Press, 2005.
15. Jolaei, Soodabeh, and Nahid Dehghan Nayeri. *Nursing Ethics*. Tehran: Ministry of Health, Nursing Department, 2009.
16. B, Rick K.L. *Nursing Ethics across the Curriculum and into Practice*. Boston: Jones and Bartlett Publisher. (The latest edition)
17. Davis A.J, Tschudin V., Rave L.D. *Essentials of Teaching and Learning in Nursing*.
18. Thompson I.E, Melia K.M, Boyd Kenneth M, Horsburg D. *Nursing Ethics*. Edinburgh: Churchill Livingstone. (Latest edition)
19. Sachedin, A. *Islamic Biomedical Ethics: Principles and Appreciations*. Oxford University Press, 2009.

Student assessment practices

- Continuous and final assessments
- Assessment of student's written and oral assignments

Title of the course: Nursing Theories and Concepts and Their Application in Nursing Management

Code of the course: 04

Prerequisite: -

Number of credits: 2 units

Type of the course: Theoretical 1.5 units – Practical 0.5 unit

Principal objective(s) of the course

At the end of the course, applicants are needed to explain different nursing theories and their necessity in adult health care as well as demonstrating their bases, conditions, and applications.

Course description

The advancement of nursing profession is the culmination of taken scientific approaches together with knowledge production in terms of empirical knowledge. Theories and patterns are literary the nursing expertise which facilities the application of health care skills.

Main topics: (52 hours)

I. Theoretical, 1.5 Units (26 hours)

- Understanding nursing theories and patterns
- Specifications of a theory and its relation to a pattern
- A historical overview of theories and models in theory-based nursing
- Nursing process in providing nursing cares
- Theorists and providers of established nursing models such as Florence Nightingale, Roy, Orem, Johnson, Watson, King, Rogers, Abdellah, Pepalu, etc.
- Fundamentals, conditions, and applications of nursing theories and models

Internship: 0.5 unit (26 hours)

Services: designing, planning, and implementing nursing cares based upon nursing models and clinical evidence

Field: departments of internal medicine surgery

Watch: according to the schedule

Principal references:

1. Alligood, Martha Raile ed. *Nursing Theory: Utilization and Applications*. 5th ed. United States: Elsevier, 2014.
2. Johnson, Betty, and Pamela Webber. *An Introduction to Theory and Reasoning in Nursing*. Lippincott: Williams and Wilkins, 2013.
3. All the available books and papers related to the latest trends in nursing theories and patterns

Student assessment practice

- Active Participants in class and group discussions
- Giving summaries of papers and conferences
- Selecting an appropriate model, checking its condition and implementation in of the professional fields, and delivering an oral and written report (practical project)
- Midterm and final examination

Internship

- At least two nursing care plans within nursing pattern frameworks should be drawn

Title of the course: Nursing Services Management in Clinical Departments

Code of the course: 05

Number of credits: 1.5 units

Prerequisite: Nursing Theories, Patterns, and their Application

Type of the course: Theoretical 1 unit, Practical 0.5 unit

Principal objective(s) of the course

Acquiring the knowledge and skills of nursing leadership and management in order to efficiently manage organizations involved in different areas of health care, treatment, and rehabilitation.

Course description

In this module the history, theories, principles, and managerial tasks with special reference to the relevant concepts will be viewed. In practice, quality improvement process, nursing criteria, and strategy management will benefit the nursing staff to efficiently manage the related organizations and improve their managerial skills.

Main topics: (43 hours)

I. Theoretical, 1 unit (27 hours)

- Fundamentals of nursing care management
- An overview of management principles (planning, organizing, leadership, monitoring, and controlling)
- Organizational psychology (charge, relationship, motivation, creativity)
- Budgeting and economy in nursing management
- Familiarity with various national and international nursing organizations
- Recruiting and retaining, developing, and improving human resources
- On-the-job training and retraining
- Standards and auditing in nursing

- Decision making and problem resolving
- Authority and devolution
- Evaluation of staff performance
- Strategic management, participative management, time management, Total Quality Management (TQM)
- Crisis and disaster management
- Management Information System (M.I.S.)

II. Internship 0.5 Unit (26 hours)

Services: Supervising the appropriate implementation of patient care

- Supervising the procedure of patient and her family's training (discharge planning and its follow-up at home)
- Recognizing the training needs of the staff and continuous planning based upon the needs listed
- Familiarity with different levels of health care centers management in cooperation with managers responsible for managerial planning and evaluation and direction
- Providing care for patients admitted to surgery- related sections by means of the offered models and required skills

Field: general and specialized departments of internal medicine surgery

Watch: according to the schedule

Principal references:

1. Gillies, Dee A. *Nursing Management: A Systems Approach*. (The latest edition). WB Saunders Co.
2. Tomey, A.M. *Nursing Leadership & Management*. (The latest edition). Thomson Delmar Learning.
3. Swansburg, Russell C., and Richard J. Swansburg. *Introductory Management and Leadership for Nurses*. The latest edition. Jones & Bartlett Learning, LLC.
4. Kelly, P. *Nursing Management and Leadership*. The latest edition. Elsevier.
5. The available academic journals and book related to nursing management

Student assessment practices

Theoretical assessment

- Participating in class and completing a term project
- Midterm and final examination given for both theory and practice
- Giving a seminar on nursing management issues

Title of the course: Client Training Methods

Code of the course: 06

Prerequisite: -

Number of credits: 1.5 units

Type of the course: Theoretical 1 Unit – Practical 0.5 Unit

Principal objective(s) of the course

Obtaining the knowledge and methodologies of teaching and educational planning in order to organize, teach, and evaluate the teaching procedures with the purpose of rising of patients and their families' awareness in line with the staff and students' in different levels.

Course Description

In this module, teaching and training methodologies with their effective factors will be viewed. Each of the students is required to assess and present a written educational plan based on the provided patterns within a group of classmates and non-classmates.

Main topics: (34 hours)

I. Theoretical, 1 Unit (17 hours)

- Learning (definitions, theories, principles) fundamentals, procedure and effective factors in learning and teaching
- Introducing teaching patterns
- Educational planning, aims, strategies, and materials
- Types of learning, mental skills, and strategies
- Clinical education principles
- Continuous and lifelong learning
- The steps of giving panels, seminars, and congresses
- Training needs assessment in health system

- Training the client and their family
- Selecting and making use of the media
- Methods of distance learning
- Recent methodologies in medical science
- Designing and planning curriculum (individual and group)
- Educational assessment (definitions, principles, types, examinations and their application)
- Performance assessment

II. Practical 0.5 Unit (17 hours)

- Designing and planning a training scheme for the patient and their family
- Designing and planning a training scheme for the staff
- Designing and planning a training scheme for the student

Principal references:

1. Remiszowski, A.G. *Designing Instructional Systems*. The latest edition. Rutledge.
2. Lesin, Cynthia B., Joellyn Pollock, and Charles M. Reigeluth. *Instructional Design Strategies and Tactics*. Educational Strategies. (The latest edition).
3. Keating, S.B. *Curriculum Development and Evaluation in Nursing*. (The latest edition). Philadelphia: Lippincott Williams & Wilkins.
4. Uys, L.R. & Gwelve, N.S. *Curriculum Development in Nursing: Process and Innovation*. The latest edition. London: Routledge.
5. Bastable, S.B. *Nurse as Educator: Principles of Teaching and Learning Practice*. The latest edition. Boston: Jones & Bartlett Publisher.
6. Billings, Diane M., Judith. A Halstead. *Teaching in Nursing: A Guide for Faculty*. (The latest edition. Elsevier: Saunders.
7. Pollard, Andrew, Julie Anderson et al. *Reflective Teaching: Evidence-informed Professional Practice*. The latest edition. London: Continuum.
8. All the available books and papers related to teaching methodology and curriculum development

Student assessment practices

Theory

- Active participation in the class
- Midterm and final examination
- Handling in written research elaborating on the impact of constant instruction in improving the health care services

Practice

- Designing, implementing, and presenting a written curriculum developed for the client and their family
- Designing, implementing, and presenting a written curriculum developed for children
- Designing, implementing, and presenting a written curriculum developed for students

Title of the course: Clinical Pharmacology

Code of the course: 07

Number of credits: 1.5 units

Prerequisite: -

Type of the course: Theoretical

Principal objective(s) of the course

Students will master pharmacological effects, drug interactions, side effects, dosages, nursing precautions and provide drug usage instructions for the patient and their family.

Course description

This module covers the clinical pharmacology together with pharmacological treatment considering patients' common acute and chronic problems with a nursing approach.

Main topics: (26 hours)

- An overview of the principles of pharmacokinetics and pharmacodynamics of drugs
- Understanding and making use of drugs in body systems disorders
- Nursing interventions and precautions in chemotherapy and radiopharmaceuticals
- How to use new technology in the drug therapy
- Instructing the patient and their family to correctly taking the drugs
- Understanding and application of emergency medicine

Principal references

1. The latest resources and academic journal available for pharmacology and pharmacotherapy
2. Greenstein, B. Gloud. *Trounce's Clinical Pharmacology for Nurses*. The latest edition. Churchill Livingstone.
3. Boyles, B.E. and Reiss, B.S. and Evans M.E. *Pharmacological Aspects of Nursing Care*.

The latest edition. Thomson, Delmar.

4. Jones & Bartlett Learning. *Nurse's Drug Handbook*. The latest edition.

5. Bruce D. Clayton BS PharmD RPh and Michelle Willihngan. *Basic Pharmacology for Nurses*.

The latest edition. Mosby, Elsevier.

Student assessment practices

- Active participation in the class
- Midterm and final examination

Title of the course: Pathophysiology

Code of the course: 08

Prerequisite: -

Number of credits: 1.5 Units

Type of the course: Practical

Principal objective(s) of the course

Providing learning opportunities to expand students' knowledge regarding healthy people's different body organs and their function and physiological response to those organs disorders.

Course description

Understanding the physiology of different body organs leads to evaluate, diagnose, and formulate nursing care plans.

Main topics: (26 hours)

Advanced physiology, pathophysiology of different organs, including the following topics:

- Cell, cell membrane and its function
- Muscular, skeletal, and nervous systems
- Cardiovascular system
- Respiratory system
- Digestive system
- Genitourinary system
- Fluids and electrolytes in the body
- Endocrinology
- General principles and physiology of the senses
- Hematology, coagulation, and immunity
- Metabolism and temperature regulation

Principal references

1. The latest references academic journals available for human physiology
2. The latest reference books for physiology

Student assessment practices

- Active participation in the class
- Midterm and final examination

Title of the course: Adult Health Monitoring

Code of the course: 09

Prerequisite: -

Number of credits: 2 units

Type of the course: Theoretical 1 Unit – Practical 1 Unit

Principal objective(s) of the course

Applicant will acquire knowledge and understanding of health status to determine deviations from health and make use of the nursing processes (diagnosis, planning, implementation, and evaluation) in order to retain and improve patients' health and the life of their quality.

Course description

In this module reviews health condition from nursing perspective and nursing approaches as well as evaluating the patient's quality of life. Moreover, providing the appropriate milieu for the applicants will enable them to determine patients' health deterioration.

Main topics: (68 hours)

I. Theoretical, 1 unit: (17 hours)

- Checking patient's health status by means of acquired skills such as interview, consultation, diagnosis of all body organs, and laboratory and radiological reviews
- Checking patient's health status by means of different nursing models
- Documenting patient's health status by means of different approaches
- Checking patient's life quality and its dimensions

II. Internship 1 unit: (51 hours)

Services

- Checking the health status of all systems of the body by means of appropriate equipment and handing in a written report (at least one case)

- Studying the needs of preparing, training and taking care of the patient during diagnostic and paraclinic tests (computed tomography scan, radiology, magnetic resonance imaging, etc.), and conducting related procedures under the supervision of the lecturer in charge

Field: surgery and Internal Medicine departments, emergency, and clinics

Watch: according to the schedule

Principal references

Reference books, websites, and papers related to checking the health status from nursing viewpoint

Student assessment practices

- Active participation in the class
- Midterm and final examination
- Handing in three evidence-based reports on the health status of the systems of body (cardiovascular, respiratory, etc.)
- Providing nursing diagnoses based on the prepared documentation
- Providing interventions and nursing cares based on clinical diagnoses

Internship

Handing out presentations and assignments, making use of nursing approaches in checking health status (stress, compatibility, beliefs and values, communications, cognitive patterns, sleep and rest, the concept of self, etc.) are highlighted.

Title of the course: Nursing Disorders and Medical/Surgical Acute Disease

Code of the course: 10

Prerequisites: Clinical Pharmacology, Pathophysiology, Adult Health Monitoring

Number of credits: 2 units

Type of the course: Theoretical 1.5 Units – Internship 1.5 Units

Principal objective(s) of the course

Applicants will acquire the knowledge of preventing and dealing with problems, providing comprehensive nursing cares for patients with acute disorders based upon nursing theories and procedures to meet care needs in disasters and emergency situations as well as monitoring the clients in those critical situations.

Course description

Relying on their previously acquired knowledge, applicants will learn the ways to prevent an emergency, cope with disasters, and monitor patients with acute disorders. Besides, they will develop their skills in clinical milieu through regular attendance in different wards and emergency departments.

Main topics: (98 hours)

I. Theoretical, 1.5 units (26 hours)

- The concept of acute disorders
- Preventing emergency situations
- Understanding nursing patterns and their application in acute disorders (cardiovascular, cerebrovascular, metabolic, pulmonary, nephrotic and nephritic, poisoning, and substance abuse)
- Nurse's role in prescribing the common drugs in the mentioned situations and instructing the emergency needs to patients
- The role of nutrition in prevention treatment of acute disorders

- Nurse's role in improving the lifestyle of patients suffering from acute diseases and their families
- Monitoring the patient with acute disease and taking urgent measures
- Case management in disasters and emergency situations

II. Internship: 1.5 Units (77 hours)

Services: providing and making use of specialized nursing cares and interventions with emphasis laid upon nutritional cares, medical care, and daily activities with respect to client's mental condition.

Field: all surgical-internal departments (adult acute diseases) – emergency

Watch: according to the arranged schedule

Principal references

Books, papers, and websites related to acute diseases, emergencies, and nursing cares

Student assessment practices

I. Theory:

- Active participation in the class
- Writing summaries of the papers related to the course
- Taking the final exam

II. Internship

- Regular attendance in the ward, clinical setting, and related departments
- Presentation and implementation of the three nursing care plans related to acute disorders, based on the selected nursing pattern and with an emphasis on nutritional and medical care
- Running a journal club in the ward under supervision of the lecturer in charge

Title of the course: Nursing Disorders and Medical/Surgical Chronic Disease

Code of the course: 11

Prerequisites: Clinical Pharmacology, Pathophysiology, Adult Health Monitoring

Number of credits: 3 units

Type of the course: Theoretical 1.5 units – Internship 1.5 units

Principal objective(s) of the course

Applicants will acquire the knowledge of providing comprehensive nursing cares for patients with chronic disorders which result in organ transplants. Training the patient in line with nursing theories and process in a manner to recognize patients' need cares at home. The applicant is required to prepare and implement care plans, train rehabilitation and evidence-based 'self-care' skills to the patient and their family.

Course description

Relying on their previously acquired knowledge, applicants will learn the ways to train patients suffering from chronic disorders, their families, and patients with vital organ transplants (cardiovascular, respiration, neurology, kidney, metabolic and diabetes, absorption and digestion and excretion system 'digestion'). Furthermore, applicants will learn the nursing patterns for patients' home care, rehabilitation, and teaching them self-care skills at various environments.

Main topics: (98 hours)

- Understanding the concepts of acute disorders, self-care, home care, and rehabilitation based upon nursing diagnosis
- Chronic lesions in critical systems (heart failure, chronic obstructive pulmonary disease, chronic kidney disease, neurological disorders, AIDS, etc.), nursing measures based on nursing diagnosis

- Chronic metabolic syndrome (diabetes, obesity, elevated blood pressure, etc.), nursing measures based on nursing diagnosis
- Chronic lesions of the digestive system (peptic ulcer disease, stomach and esophagus ulcers), nursing measures based on nursing diagnosis
- Applying common drugs to the above-mentioned chronic disorders as well as training the patient and their family for self-care
- Providing nursing cares for patients suffering from cancer in line with nursing procedures and patterns
- The role of nutrition in the prevention and treatment of the listed diseases
- Nurse's role in improving the lifestyle of patients suffering from acute diseases and their families
- The concept of body transplants and the required nursing actions
- Ethical issues in organ transplantation
- Nurse's role in taking care of the donor and receiver of the transplanted organ
- Reduction of complications and lifestyle improvement methods

II. Internship: 1.5 Units (77 hours)

Services: providing and making use of specialized nursing cares and interventions in chronic disorders surgical-internal organ transplantation based on nursing processes and diagnoses with an emphasis on nutritional and medical cares, daily life activities, and patient's mental and social condition

Field: all Surgery and Internal Medicine Wards with chronic disorder patients

Watch: according to the arranged schedule

Principal references

Books and papers related to chronicle disorders, organ transplantation, home care, rehabilitation, and self-care

Student assessment practices

I. Theory:

- Active participation in the class
- Writing summaries of the papers related to the course

- Taking the midterm and final exams

II. Internship:

- Regular attendance in the ward, clinical setting, and related departments
- Presentation and implementation of three nursing care plans related to acute disorders, based on the selected nursing pattern and with an emphasis on nutritional and medical care
- Running a journal club in the ward under supervision of the lecturer in charge

Title of the course: Complementary Medicine, Alternative Medicine, and the Nurse's Role

Code of the course: 12

Prerequisites: Clinical Pharmacology, Pathophysiology, Adult Health Monitoring

Number of credits: 1.5 Units

Type of the course: Theoretical 1 Unit – Practical 0.5 unit

Principal objective(s) of the course

Applicants will study the basics of complementary medicine and alternative medicine, their applications for maintaining and promoting health, prevention, rehabilitation, and treatment of acute and chronic in adults.

Course description

In this module, applicants will study the concept and instances of traditional medicine to apply them in prevention and treatment of diseases for health improvement. Meanwhile, the applicants ought to choose the approach that well suits to train the chronic diseases patients and their families.

Main topics: (43 hours)

I. Theoretical, 1 Unit (17 hours)

- The history of complementary medicine and alternative medicine in patients' treatment
- The philosophy and definition of complementary medicine and alternative medicine
- The classifications in complementary medicine and alternative medicine
- The current systems in complementary medicine and alternative medicine and the nurse's role within the medical team to provide specialized cares such as:
 - i- Traditional Chinese medicine (acupuncture), homeopathy
 - ii- Applying physical–mental and spirituals treatments, e.g., saying prayers, hypnotism, Imagery, meditation, the yoga, group therapy, treatment by means of colors, art, biofeedback, music, relaxation, psychoneuroimmunology

- iii- Biologically based therapies such as: herbal medicine, nutrition, and aromatherapy
- iv- Physical therapy interventions such as: bloodletting, massage, exercise, reflexology, craniosacral therapy, chiropractic, Alexander technique
- v- Energy medicine treatments such as: Therapeutic Touch (TT), energy therapy, bioelectromagnetics, vibrational energy medicine

II. Internship: 0.5 unit (26 hours)

Services: In addition to attending educational, research, and clinical centers connected to complementary medicine and alternative medicine, applicants will have the opportunity to treat clients with complementary and alternative medicines and are required to deliver a nursing care report within the framework of nursing procedures.

Field: complementary Medicine educational research centers

Watch: according to the arranged schedule

Principal references:

- 1- Books and papers related to Complementary Medicine and Alternative Medicine
- 2- Neighbors, M. Marek, J.F. Green, C.J. Manahan, F.D. Phipps. *Medical Surgical Nursing*. The latest edition. Philadelphia: Mosby.
- 3- Kearny, N. Richardson, A. *Nursing Patients with Cancer: Principles and Practice*. The latest edition. Edinburgh: Elsevier.

Student assessment practices

I. Theory:

- Active participation in classes
- Writing paper summaries related to the course
- Taking the midterm and final exams

II. Internship:

- Regular attendance in research and clinical centers connected to complementary medicine and alternative medicine

- Preparing and delivering one report on the effects of the therapies listed in this course considering each of the commonly applied medications in isolation (at least five cases)

Title of the course: Passive Defense and the Nurse's Role

Code of the course: 13

Prerequisites: Clinical Pharmacology, Pathophysiology, Adult Health Monitoring

Number of credits: 0.5 unit

Type of the course: Theoretical

Principal objective(s) of the course

Understanding the key concepts of passive defense and its outcomes

Course description:

In this module, applicants will study the concepts of passive defense and the nurse's role to map out plans and training schemes based on nursing patterns intended to prevent, protect, treat, and rehabilitate the sufferers and their families.

Main topics: (9 hours)

- The role and application of nursing patterns in coping with passive defense
- Weapons and biological agents including:
 - i. Microbes: Anthrax, Botulism, Plague, pseudo-plague
 - ii. Viruses: Chickenpox, The flu, viral hemorrhagic fevers (VHFs), e.g., Ebola, Marburg, Lassa, Argentine
 - iii. Chemicals and their different types including:
 - Cyanides
 - Nerve agents
 - Blood agent
 - Blister agents
 - iv. Nuclear and radiation agents
 - v. The High Frequency Active Auroral Research Program (HAARP)

- vi. Prevention and passive defense
- vii. Management of care through collaboration
- vii. The role and application of nursing

Principal references

1. Books, academic papers and websites related to Passive Defense
2. Neighbors, M. Marek, J.F. Green, C.J. Manahan, F.D. Phipps. *Medical Surgical Nursing*. The latest edition. Philadelphia: Mosby, Elsevier.
3. [http:// http://www.bioterrorism.slu.edu/](http://www.bioterrorism.slu.edu/)

Title of the course: Oncology Nursing

Code of the course: 14

Number of credits: 1.5 units

Type of the course: 0.5 Theoretical – 1 Unit Internship

Prerequisites: Clinical Pharmacology, Pathophysiology, Adult Health Monitoring

Principal objective(s) of the course

Applicants will acquire the required knowledge and skills for providing nursing cares in oncology disorders, their complications, and drug side effects grounded on evidence-based nursing diagnoses.

Course description

Relying on their previously acquired knowledge, applicants ought to actively take part in prevention, treatment, and rehabilitation of patients suffering from cancer. Additionally, applicants should take necessary cancer prevention steps considering their own health as well the patients and their families.

Main topics: 60 hours

I. Theoretical, 0.5 unit (9 hours)

- Epidemiology and etiology of cancer
- Pathophysiology of the metastatic process and morphology of malignant cells
- Invasion and metastasis
- The role of the immune system
- Classification of cancer
- Gerontological values for cancer
- The roles of culture, nutrition, and conduct in cancer
- Detection, prevention, and screening of cancer
- Cancer diagnosis and nursing considerations

- Common treatments: surgery, radiotherapy, chemotherapy, bone marrow transplantation, stem cells and their application, Biotherapy, Hyperthermia, Photodynamic therapy (PDT), targeted cancer therapy, unproven treatments, and non-traditional therapies
- The nurse's role in preparing the patient for treatment namely preparation the drugs or disposal of waste
- Cancer emergency and the nurse's role:
 - i. Structural effects: cardiac tamponade (pericardial tamponade), intracranial pressure (ICP), Spinal cord compression, superior vena cava syndrome (SVCS)
 - ii. Metabolic complications: disseminated intravascular coagulation (DIC), hypercalcemia, intrapleural infusion, septic shock, syndrome of inappropriate antidiuretic hormone secretion (SIADH), tumor lysis syndrome (TLS), hypersensitivity to antineoplastic agents
- Taking care of patients with advanced cancer
- The role of nurses in palliative care cancer
- The role of nurses in consoling and instructing patients with cancer and their families

II. Internship: 1 Unit (51 hours)

- Providing comprehensive nursing cares (physical, mental, social, spiritual) at prevention levels
- Teaching self-care skills to the patient and their families
- Paying attention to self-protection against radiopharmaceutical and cytotoxic drugs in the process of nursing the patient
- Providing Evidence-based nursing cares for patients and their families undergoing radiotherapy, chemotherapy, bone marrow transplantation

Field: departments of cancer, Oncology, and cancer diagnosis centers (radioisotope – mammography)

Watch: according to arranged schedule

Principal references

1. Books, academic papers and websites related to chronic disorders and home care, rehabilitation, and self-care

2. Neighbors, M. Marek, J.F. Green, C.J. Manahan, F.D. Phipps. *Medical Surgical Nursing*. The latest edition. Philadelphia: Mosby.
3. - Kearny, N. Richardson, A. *Nursing Patients with Cancer: Principles and Practice*. The latest edition. Edinburgh: Elsevier.
4. Bare, B.G. & Hinkle, J.L. Cheever, K.H. *Brunner & Suddarth's Textbook of Medical-Surgical Nursing (Textbook of Medical-Surgical Nursing)*. The latest edition. Philadelphia: Lippincott Williams and Wilkins.
5. Otto, S.E. *Oncology Nursing*. The latest edition. St. Louis: Mosby, Elsevier.
6. Kemp, C. *Terminal Illness: A Guide to Nursing Care*. The latest edition. Philadelphia: Lippincott
- 7- Wilkes, G.M. and Ades, T.B. *Patient Education Guide to Oncology Drugs*. Jones etc Bartlett Publishers.

Student assessment practices

I. Theory:

- Active participation in classes
- Writing paper summaries related to the course

II. Internship:

- Regular attendance in related clinical departments
- Delivering two reports on patients with chronic oncology disorders ranging from checkup to health assessment based upon nursing patterns and pharmaceutical and nutritional cares

Title of the course: Palliative Cares and Nurse's Role

Code of the course: 15

Number of credits: 1

Type of the course: Theoretical 0.5 unit – Internship 0.5 unit

Prerequisites: Clinical Pharmacology, Pathophysiology, Adult Health Monitoring

Principal objective(s) of the course

Applicants will acquire the required knowledge and skills for providing nursing cares for the patient and their family in critical and final stage of life grounded on evidence-based nursing diagnoses.

Course description

In this module, applicants will appreciate the significance of palliative cares and measures in patient's critical and final stage of life and will be qualified to provide evidence-based palliative cares.

Main topics: 35 hours

Theoretical, 0.5 unit (9 hours)

- The history and grounds of founding and developing palliative cares
- Contending with progressive diseases and death: living with death, psychological care, family and medical team collaboration, balancing
- Attempting to preserve and improve the quality of life
- The necessary communicative skills for patients and their families in need of palliative cares
- The role of self-consciousness and self-care in the improvement of palliative measures
- The role of hope, courage, and spirituality in the improvement of lifestyle
- The role of the nurse and medical team in spotting the recurrence of complications and alleviating the malignancy
- The role of the nutrition in controlling further complications
- Opiate pain management

- The role of nurse in controlling physical and psychological symptoms common in the final stages of life such as: pain, nausea, vomiting, constipation, anorexia, fatigue, dyspnea, insomnia, anxiety, depression, vertigo, and presyncope
- Emergency relief services
- Development prospect and the future of palliative therapies

II. Internship: 0.5 unit (26 hours)

- Offering nursing services for patients in need at clinical centers and checking follow-up treatment at patient's home
- Teaching self-care skills to the patient and their families
- Paying attention to self-protection against radiopharmaceutical and cytotoxic drugs in the process of nursing the patient

Field: all Surgery and Internal Medicine Wards with chronic disorder patients as well as oncology department

Watch: according to the arranged schedule

Principal references:

1. Books, academic papers, and websites related to palliative cares and measures in patient's critical and final stage of life, rehabilitation, and self-care
2. Kearny, N. Richardson, A. *Nursing Patients with Cancer: Principles and Practice*. The latest edition. Edinburgh: Elsevier.
3. Hegner, B.R. Gerlach, M.J. *Assisting in Long-term Care*. The latest edition. Thomson
4. Buckley, J. *Palliative Care: An Integrated Approach*. The latest edition. Wiley-Blackwell
5. Singh, D.A. *Effective management of Long-term Care Facilities*. The latest edition. Sudbury: Jones & Bartlett Publishers.
6. Kemp, C. *Terminal Illness: A Guide to Nursing Care*. The latest edition. Philadelphia: Lippincott
7. Lugton, J. & McIntre, R. *Palliative Care: The Nursing Role*. The latest edition.
8. Cowen, P.S. & Moorhead, S. *Current Issues in Nursing*. The latest edition. Philadelphia: Mosby & Elsevier.

Student assessment practices

I. Theory:

- Active participation in classes
- Writing paper summaries related to the course

II. Internship:

- Active attendance in the ward
- Delivering two reports on patients in need of palliative cares ranging from checkup to health assessment based upon nursing patterns and pharmaceutical and nutritional cares