

## **CURRICULUM**

### **Historical Perspective**

The Department of Nursing was established in 1979 with a four-years study program as part of the School of Medicine of the National and Kapodistrian University of Athens and its first opening was at the academic year 1980-81.

Since the academic year 1983-84, the Department of Nursing became equal with the other Departments of the University according to the law for the Higher Educational Institutes, the 2424/83 decision of the Council of State, the Bl.959/22-8-83 Ministry Decision and the since 25-7-83 decision of the senate of the National and Kapodistrian University of Athens. Since then, the Department of Nursing was included in the School of Health Sciences as an independent department.

Since the academic year 2005-2006, the Academic training of the students of the Military Nursing Academy is offered by the Department of Nursing of the National and Kapodistrian University of Athens, while the military training is offered in the Military Academy according to their internal schedule.

### **Mission**

The Nursing Science together with the Medicine, Dentistry and Pharmacy, consist of the Health Sciences. The Department of Nursing aims at the spherical education of nurses as scientists. The subjects of the theoretical and practical education refer to the prevention, treatment and rehabilitation of healthy or ill people, their family and the community.

### **The Place**

The Department of Nursing is established at the building located at 123 Papadiamantopoulou Str. in Goudi. The building includes 5 teaching rooms, 8 laboratories, 21 offices and some more space for secondary purposes. The Secretariat of the Department is located at the University building at 1a Dilou Street (Goudi, tel. 210-7461402).

### **Organization and Function**

The personnel of the Department of Nursing is distributed in 5 sections:

- Basic Science Section
- Section of Internal Medicine – Nursing
- Section of Surgical – Nursing
- Section of Public Health
- Section of Psychiatric Health and Science of Behavior

### **Elected Governing Body**

**President:** Professor Pavlos Myriantheys

**Vice President:** Professor Dafni Kaitelidou

### **Sections Directors**

Public Health: Professor Athena Kalokairinou

Psychiatric Health & Behavioral Sciences: Professor Evmorfia Koukia

Internal Medicine-Nursing: Professor Margarita Giannakopoulou

Basic Sciences: -----

Surgical-Nursing: Professor Konstantinos Birbas

### **The Department of Nursing comprises the following Laboratories & Sections:**

#### **Laboratories**

- **Section of Internal Medicine-Nursing**
  - Clinical Nursing Skills Laboratory
  - Pediatric Research Laboratory
  - Infections Disease Laboratory
- **Section of Basic Sciences**

- Biology-Biochemistry Lab
- Anatomy-Histology-Embryology Lab
- Physiology and Clinical Neurophysiology Lab
- **Section of Public Health**
  - Prevention
  - Demography
  - Clinical Epidemiology
  - Health Informatics
  - Center for Health Services Management and Evaluation
  - Biostatistics
  - Laboratory of Community Health Nursing
- **Section of Psychiatric Health & Behavioral Sciences**
  - Psychopathology-Neuropsychology. Unit of Social Psychiatry-Center for Psychiatric Health
- **Section of Surgical Nursing**
  - Lab of Pulmonary function testing, Bronchoscopy and Hyperbaric Medicine. Sleep Unit and Center for the Evaluation and Identification for the need for Respiratory Support.
  - Lab of vascular access

#### **Hospital Sections**

- **Section of Internal Medicine-Nursing**
  1. Department of Internal Medicine
  2. Department of Pediatric, including
    - Pediatric Clinic
    - Unit of Endocrinology, Metabolism and Diabetic Center
    - Unit for Clinical Genetics
    - Unit for Pediatric Gastroenterology, Diet and Obesity
  3. Unit for the Study and Investigation of Respiratory Diseases Pediatric
- **Section of Surgical-Nursing**
  1. Department of Surgery
  2. Intensive Care Unit

**CURRICULUM  
FOR THE UNDERGRADUATE DEGREE IN NURSING  
2024-2025**

**COURSES PER SEMESTER**

<b>FIRST SEMESTER</b>						
<b>COURSES</b>	<b>LEC</b>	<b>LAB</b>	<b>SEM</b>	<b>CL.PR.</b>	<b>TOTAL</b>	<b>ECTS</b>
<b>COMPULSORY</b>						
Anatomy I	2	1			3	4
Histology-Embryology	2	1			3	4
Biochemistry	3				3	5
Cell Biology	2	1			3	4
Biostatistics	2		2		4	5
Introduction to Nursing	2			2	4	4
					<b>TOTAL</b>	<b>26</b>
<b>ELECTIVES</b>						
Bioethics	2				2	2
Introduction to Computer Science and Health Data Management	2	2			4	2
Transcultural Nursing	2				2	2
					<b>TOTAL</b>	<b>6</b>

**FIRST SEMESTER: Compulsory 26 + Electives 4 = 30 ECTS**

<b>SECOND SEMESTER</b>						
<b>COURSES</b>	<b>LEC</b>	<b>LAB</b>	<b>SEM</b>	<b>CL.PR.</b>	<b>TOTAL</b>	<b>ECTS</b>
<b>COMPULSORY</b>						
Anatomy II	2	2			4	4
Physiology I	3				3	4
Health Informatics	2	2			4	4
Fundamentals of Nursing I	3	3			6	6
Health Economics focused on Nursing Care	3				3	4
Legislation and Ethics in Nursing	3				3	4
					<b>TOTAL</b>	<b>26</b>
<b>ELECTIVES</b>						
Human Genetics	2				2	2
Biology of Behavior	2				2	2
Health Sociology	2				2	2
					<b>TOTAL</b>	<b>6</b>

**SECOND SEMESTER: Compulsory 26 + Electives 4 = 30 ECTS**

**TOTAL 1<sup>st</sup> ACADEMIC YEAR 2024-2025 = 60 ECTS**

THIRD SEMESTER						
COURSES	LEC	LAB	SEM	CL.PR.	TOTAL	ECTS
<b>COMPULSORY</b>						
Physiology II	3				3	4
Pharmacology - Clinical Pharmacology	2			2	4	4
Fundamentals of Nursing II	2			4	6	5
Community Nursing I	2			8	10	6
Microbiology	2	1			3	3
First Aid	2			2	4	4
					TOTAL	26
<b>ELECTIVES</b>						
Nursing/Biomedical Terminology	2				2	2
Biomedical Informatics & Technology	2				2	2
Clinical Nutrition	2				2	2
					TOTAL	6

**THIRD SEMESTER: Compulsory 26 + Electives 4 = 30 ECTS**

FOURTH SEMESTER						
COURSES	LEC	LAB	SEM	CL.PR.	TOTAL	ECTS
<b>COMPULSORY</b>						
Internal Medicine I	2			5	7	5
Organization and Management of Nursing Care Plan	2		1	4	7	5
Physical Examination - OSCE	2			2	4	4
Health Psychology	2		1		3	4
Infection Control Nursing	1			4	5	4
Applied Epidemiology and Prevention	2	2			4	4
					TOTAL	26
<b>ELECTIVES</b>						
Occupational Health	2			1	3	2
Health Information Systems	2				2	2
Communication Skills	1		1		2	2
					TOTAL	6

**FORTH SEMESTER: Compulsory 26 + Electives 4 = 30 ECTS**

**TOTAL 2<sup>st</sup> ACADEMIC YEAR 2024-2025 = 60 ECTS**

FIFTH SEMESTER						
COURSES	LEC	LAB	SEM	CL.PR.	TOTAL	ECTS
<b>COMPULSORY</b>						
Internal Medicine II	2			5	7	4
Surgery	3			4	7	5
Medical Nursing I	3			5	8	6
Surgical Nursing I	2	2		4	8	5
Health Services Management and Quality Assurance	3				3	4
Gerontology Nursing	2			4	6	4
					<b>TOTAL</b>	<b>28</b>
<b>ELECTIVES</b>						
Rehabilitation Nursing of Patients with Chronic Diseases	1			2	3	2
Oncology Nursing	2			2	4	2
Neurological/Neurosurgical Nursing	1			2	3	2
					<b>TOTAL</b>	<b>6</b>

**FIFTH SEMESTER: Compulsory 28 + Electives 2 = 30 ECTS**

SIXTH SEMESTER						
COURSES	LEC	LAB	SEM	CL.PR.	TOTAL	ECTS
<b>COMPULSORY</b>						
Psychiatric	3			6	9	5
Medical Nursing II	3			5	8	5
Surgical Nursing II	2	2		7	11	5
Community Nursing II	2			4	6	5
Pediatrics	2			3	5	5
Research Methodology and Evidence Based in Nursing	2		1		3	3
					<b>TOTAL</b>	<b>28</b>
<b>ELECTIVES</b>						
Nephrology Nursing	1			2	3	2
Cardiovascular Nursing	2			2	4	2
Pulmonology-Nursing of Pulmonary Diseases	2			1	3	2
					<b>TOTAL</b>	<b>6</b>
*Acquisition of clinical experience	-			2 months in Summer		8

**SIXTH SEMESTER: Compulsory 28 + Electives 2 = 30 ECTS**

**TOTAL 3<sup>st</sup> ACADEMIC YEAR 2024-2025 = 60 ECTS**

SEVENTH SEMESTER							
COURSES	LEC	LAB	SEM	CL.PR.	TOTAL	ECTS	
<b>COMPULSORY</b>							
Pediatric Nursing	2	1		5	8	5	
Critical and Intensive Care	2			5	7	4	
Emergency and Intensive Care Nursing	2			5	7	4	
Mental Health Nursing	2			5	7	4	
Nurse Anesthesiology	2			5	7	4	
Nursing Theories and Nursing Care Delivery Systems	2		1	4	7	5	
					<b>TOTAL</b>	<b>26</b>	
<b>ELECTIVES</b>							
Liaison Psychiatric Nursing	1			2	3	2	
Complementary Therapies	2			2	4	2	
Oxygen Therapy and Mechanical Ventilation	2			2	4	2	
					<b>TOTAL</b>	<b>6</b>	

**SEVENTH SEMESTER: Compulsory 26 + Electives 4 = 30 ECTS**

EIGHT SEMESTER							
COURSES	LEC	LAB	SEM	CL.PR.	TOTAL	ECTS	
<b>COMPULSORY</b>							
Nursing Administration and Management	2		1	5	8	6	
Clinical Nursing (Practice)				21	21	16	
Palliative Care	2			3	5	4	
					<b>TOTAL</b>	<b>26</b>	
<b>ELECTIVES</b>							
Applied Technology in the Care of Children with Chronic Diseases	2			2	4	2	
Emergency Medicine - Traumatology	2			2	4	2	
Maternal and Gynaecological Nursing	2			2	4	2	
					<b>TOTAL</b>	<b>6</b>	

**EIGHT SEMESTER: Compulsory 26 + Electives 4 = 30 ECTS**

**TOTAL 4<sup>th</sup> ACADEMIC YEAR 2024-2025 = 60 ECTS**

**TOTAL 2024-2025 = 240 ECTS**

## **COURSE DESCRIPTION**

### **Anatomy I**

The aim of this course is to provide basic understanding and working knowledge of the structure and organization of the skeleton with the structure of the joints, the understanding of the topography of the muscles, the clinical recognition of the nerve and muscle function and its relationship to competing and competing muscles. Understanding the arterial and venous network of extremities-abdomen-chest-head-neck and learning the points of arterial palpation, venous and arterial puncture. Description of the Central Nervous System, the Peripheral Nervous System, the cranial and spinal nerves, the meninges, the cerebrospinal fluid and the vascularity of the brain.

### **Anatomy II**

The objective of this course is to provide a basic understanding and working knowledge of the clinical anatomy, histology and embryology, and to give the students a concise account of the development of the human body. The material selected for inclusion is related to the organization and function of the human respiratory, cardiovascular, digestive, urinary, reproductive and endocrine system and tissue. Also, the structure and function for understanding gross anatomy and an explanation of many of the congenital anomalies that are seen in clinical practice.

### **Applied Epidemiology and Prevention**

The course aims at the understanding of mortality and morbidity, the individual's characteristics (constitutional, environmental, behavioral), which influence the occurrence of disease (risk factors) and finally the measures of comparison, as well as the notions of the confounder or modifier. Upon completion of the course the student should be able to understand epidemiologic study.

The aim of the course is: a) to understand the philosophy of prevention, its characteristics and to compare it to therapeutics, b) to evaluate its contribution to disease control and to the decrease of morbidity and mortality, as well as the promotion of health, c) to study the main preventive programs implemented in Greece, d) to propose further preventive measures for the most important health problems.

### **Applied Technology in the Care of Children with Chronic Diseases**

The provision of specialized knowledge so as to achieve comprehension of the difficulties which arise in the care of children with chronic diseases. The care of children and teenagers with life-threatening diseases requires an active and holistic approach with emphasis on their physical, social and psychological care. The student must be aware of the basic principles, needs, specificities and impact of any chronic disease on the child and his family.

### **\*Acquisition of Clinical Experience**

The course focuses on the development and cultivation of the appropriate skills of students in implementing the basic principles of Nursing science in clinical practice. Students as members of the multidisciplinary care team are trained to be able after the completion of their studies, to take the responsibility of providing, coordinating and maintaining the continuity of nursing care.

### **Biochemistry**

The aim of the course is to analyze the biochemical processes occurring in mammalian cells, to relate biochemical events at the cellular level to the physiological processes occurring in the organism and to present examples of deviant biochemical processes in human disease.

### **Bioethics**

This course is designed to provide students with frameworks for approaching ethical issues and to enhance the students' understanding of ethical issues in nursing and health care.

### **Biology of Behavior**

Biological mechanisms and brain areas regulating behavior:

- Neurobiology of stress and addiction.
- Hormonal influences on reproductive and feeding behavior.
- Learning & Memory.

- Sex differences in cognitive abilities.

### **Biomedical informatics and Technology**

This subject will provide the student the understanding of the principles of Biomedical technology devices as these are encountered in the hospital and health care environment. The emphasis is given on principles of Biomedical informatics, biomedical Technology and bioinformatics, signal Processing Principles, imaging Devices, tomography Devices, safety issues, introduction to Bioinformatics.

### **Biostatistics**

This course provides an introduction to basic statistical procedures used in health care research. It also provides the basic knowledge necessary for the comprehension of variability in biological phenomena as well as for the classification, analysis, evaluation, description and display of data.

### **Cardiovascular Nursing**

The course aims to prepare students for assessment of cardiovascular function, how to incorporate assessment of cardiac risk factors into the health history and physical assessment of the patient, how to use assessment parameters appropriate for determining the status of cardiovascular function, how to identify the clinical significance and related nursing implications of the various tests and procedures used for diagnostic assessment of cardiac function.

### **Cell Biology**

The aim of the course is to help students understand the mechanisms underlying the phenomena of life. It includes the following topics: Macromolecules, basic techniques for the study of cells, biological membranes, cellular interactions, synthesis of DNA, RNA and proteins, cytoskeleton, mitochondria and chloroplasts, cell cycle and its control, biology of cancer.

### **Clinical Nursing (Practice)**

The course aims to the implementation by the students in clinical practice of the knowledge acquired during their studies. Emphasis is given in the development of critical thinking and clinical skills according to the nursing care and education of patients and their family, based on the principles of Nursing Process.

### **Clinical Nutrition**

The purpose of the course is an introduction to the science of nutrition. Upon successful completion of the course, the student will be able to understand the role of nutrition in human health. Also, the process of nutritional care as clinical practice in formulating an appropriate dietary intervention.

### **Communication Skills**

The purpose of this course is to sensitize students to the dynamics involved in the patient-health care provider relationship and to develop specific communication skills that will help nurses to understand effectively, support and collaborate with patients and family members throughout the course of the disease.

### **Community Nursing I**

This course focuses on the theories and principles underlying current community health nursing practice. The focus of care is on family and community. Emphasis is placed on assessing and intervening for and with a target population. The nursing role is developed with emphasis on health maintenance, health promotion and disease prevention, as facilitated by health education and appropriate use of community resources. Critical inquiry using research and epidemiological processes is fostered by didactic and clinical learning experiences.

### **Community Nursing II**

This course focuses on the role of community health nursing practice in relation to populations with special health needs. Emphasis is placed on assessing and intervening with individuals and groups with special health needs, such as home nursing, transcultural nursing, disaster nursing, etc.

### **Complementary Therapies**

Main purpose of the subject is to give students the change to learn about the scientific background of complementary treatments, through current long-term research and critical evaluation. It will also promote integrative and critical thinking, optimizing the offered healthcare.

### **Critical and Intensive Care**

#### **Emergency and Intensive Care Nursing**

These courses focus on the care given to patients with urgent and critical needs. Emergency care is viewed as a holistic concept that includes the patient, the family and significant others. An emphasis is given in physiological and psychological homeostasis.

#### **Emergency Medicine - Traumatology**

The aim of the course is to introduce the principles of patient management in emergency situations and specifically in hospital emergency departments.

That is to provide appropriate knowledge and clinical skills regarding a variety of clinical situations including medical, surgical and trauma conditions.

Specific emphasis is given on nursing evaluation, triage and initial therapeutic measures and management decisions in an emergency department environment.

#### **First Aid**

The course instructs students on the actions that have to be taken in an emergency situation. Topics include emergency resuscitation measures, patients with hemorrhage due to trauma and hypovolemic shock, heat stroke, cold injuries, anaphylactic reaction, poisoning etc.

#### **Fundamentals of Nursing I, II**

The courses focus on the actions basic to nursing practice-those commonly planned and implemented to meet the healthcare needs of individuals at any age, at any point along the health-illness continuum. The nursing actions include taking vital signs, and the health history, assessing health needs, maintaining safety, administering medications, following aseptic techniques to prevent and control the spread of microorganisms, and providing perioperative care.

#### **Gerontology Nursing**

The aim of this course is to give students the essential knowledge in order to recognize and understand problems faced by older people and their caregivers. It will facilitate the student's ability to identify and use therapeutic interventions effectively. Emphasis is given on legal and ethical issues in the care of older people.

#### **Health Economics focused on Nursing Care**

To give the student a basic understanding of the fundamentals of economic theory and of the economic forces that determine behavior in the health sector. Elements of demand and supply for health care, income and price determination, output measurement, and assessment are discussed.

#### **Health Informatics**

The course offers broad coverage of the multidisciplinary and inter-disciplinary area of Health Informatics. Applications of the Hospital Information Systems, Nursing Systems, Biostatistical Analysis Tools, Expert and Diagnostic Systems as well as Computer Imaging, Bio-medical Signal Processing and of Multimedia Education Systems are introduced both during the lectures and the laboratory classes.

#### **Health Information Systems**

Health Informatics aims at the process of collection and data processing for the extraction of information dealing mainly with data of hospitalized patients. The HIS course studies the methodology of designing systems, software development, the application of information systems and the way of assessing them. Special emphasis will be given to the clinical and the administrative subsystems of the Hospital Information Systems. Existing HIS will be demonstrated. Development of an HIS sample will be performed using a database development system.

#### **Health Psychology**

The purpose of the course is to provide knowledge that will contribute to an effective interaction with patients and families under various conditions of illness and health. Special emphasis will be given to the psychosocial care of adult and child patients facing chronic and life-threatening diseases. In addition, the course will provide opportunities for the development of active listening skills that will facilitate communication among nurses, patients, family members and colleagues.

### **Health Services Management and Quality Assurance**

The study of health services for the purpose of preparing students as potential leaders in nursing administration to function in hospitals, public health and order care delivery agencies.

This course focuses on the concept of quality assurance, the accountability on the part of the health professions to society for the quality, appropriateness, and cost of health services provided.

### **Health Sociology**

Comparison and contrast of the biomedical and the psychosocial holistic model for the total comprehension of health and illness.

### **Histology - Embryology**

The aim of this course is to provide a basic understanding of the description-identification and search of the lymphatic network and lymph node groups-stations. Description of the Central Nervous System, the Peripheral Nervous System, the cranial and spinal nerves, the meninges, the cerebrospinal fluid and the vascularity of the brain. Histological structure of muscle-muscle cells, muscle spindles, Golgi bodies. Histological structure of bones (solid-spongy), cartilage, adipose tissue, blood products. Histological structure of arteries, veins, lymph vessels and lymph nodes. Tiny structure of the brain, spinal cord and nerves. Embryonic evolution zygote-molecule-blastocyst-embryoblast-trophoblast. Early and late fetal period. Pregnancy - placental umbilical cord. How the skeletal and muscular system develops during embryogenesis. Development of the nervous system - neurosis (formation of the neural plate, the nerve folds, the neural crest and the neural tube).

Development of neurons and microglia. Cell phases during embryonic development.

### **Human Genetics**

The aim of the course is the understanding of the mechanisms of human genetic diseases, both monogenic and polygenic, as well as those due to chromosomal aberrations. The basis and social and ethical questions arising during genetic counseling are discussed. Methods such as linkage analysis and positional cloning are also presented.

### **Infection Control Nursing**

The course gives the necessary theoretical and clinical knowledge for the recognition of the risk factors for Nosocomial infections which are transmitted to patients and personnel. Special emphasis is given to high-risk hospital sections (ICU, operating rooms etc).

### **Internal Medicine I, II**

The aim of these courses is to present the essential knowledge of current internal medicine (pathophysiology, clinical manifestations, therapeutic modalities). Emphasis is given to assessment of symptoms and signs of human diseases and introduction to health history, diagnostic procedures and management of the most common disease entities.

### **Introduction to Computer Science and Health Data Management**

The purpose of the course is to introduce students to the basic concepts of information and Communication Technologies (ICT) in order to use relevant applications in their education, clinical practice and research and to become competent of understanding the evolution of digital technology. In addition, the course aims at familiarizing students with health data management which refers to the extraction, storage, maintenance and secure use of a population's health data

that comes from multiple sources across health care providers and health care organizations.

### **Introduction to Nursing**

The course explores the foundations for nursing practice from the perspective of the nurse and of a holistic understanding of the individual. Students of nursing are introduced to an evolving, challenging and rewarding profession and discipline and are provided with a knowledge base to ground the development of caregiving skills and professional relationships and behaviors.

### **Legislation and Ethics in Nursing**

This course introduces the legal process, the roles and responsibilities of the multi-disciplinary nurse and forensic professionals, and the civil and criminal applications of forensic nursing in the judicial process. The course will prepare nurses to interface with the legal system. The recognition, collection, analysis and preservation of physical evidence are presented. The sources of law, legal systems, civil and criminal systems, interaction between the law and forensic science in the courtroom, fact versus expert witness, and tasks of the fact finder will be reviewed. Specific forensic nursing competencies for professional caring practice will be applied to discussion of medical-legal issues.

The aim of this course is to extend the knowledge base of professional nursing to include ethical practice. The student will become familiar with human rights that concern health care. It focuses on the recognition of ethical issues as they arise in nursing practice and on the application of critical thinking in ethical decisions.

### **Liaison Psychiatric Nursing**

The purpose of the course is to educate students in the treatment of patients of the General Hospital, who are treated in non-psychiatric sector, and show mental health problems during their treatment. Also, the provision of knowledge regarding the support and education of relatives and health professionals involved in patient care. To this end, emphasis is placed on the cooperation of the Psychiatric sector with the Pathological and Surgical Sector concerning the problems of the mental health spectrum of the hospitalized patients, on the support of the nursing and medical staff of the above sectors as well as on the cooperation at educational level.

### **Maternal and Gynaecological Nursing**

The course focuses on the health issues of pregnancy, delivery and the post-partum period. Particular emphasis will be given to the role of the nurse in the management of these issues.

### **Medical Nursing I & II**

These courses focus on the theory underlying the principles involved in the planning of nursing interventions appropriate for adults with various complex health problems. The nursing process is used for identifying and solving health problems in order to meet a person's health care and nursing needs. Students must use critical thinking skills in their clinical practice.

### **Mental Health Nursing**

To help students learn the basic scientific principles and clinical practices of psychiatric nursing, concerning the prevention of mental disorders, nursing care, therapy and rehabilitation of mental patients.

### **Microbiology**

The study of the structure and the basic characteristics of bacteria, viruses, fungi and parasite as well as host-parasite interactions. Emphasis is given to taxonomy and the virulence factor of pathogenic microorganisms (bacteria, viruses, parasites).

### **Nephrology Nursing**

This course focuses on the role of the kidney in the regulation of fluid and electrolyte balance, acid-base balance, and blood pressure. The assessment parameters for determining the status of renal and urinary function are presented. Emphasis is given to the use of nursing process to formulate a plan of care for patients undergoing assessment of the urinary/renal system and for patients with urinary and renal health problems.

### **Neurological-Neurosurgical Nursing**

This course provides scientific knowledge and promotes nursing skills development concerning the holistic care of patients with neurological or neurosurgical health problems as well as the

support and collaboration with family members. The course focuses on nursing assessment parameters for determining the functional status of nervous system in communicative and non-communicative patients and emphasizes nursing care plans for patients with stroke, aneurysm, epilepsy, convulsions, nervous system infections, vertebral column injuries, increased intracranial pressure and neurodegenerative diseases.

### **Nurse Anesthesiology**

The course focuses on various types of anesthesia with regard to uses, advantages, disadvantages and nursing responsibilities.

### **Nursing/Biomedical Terminology**

The aim of the lesson is to describe and analyze the definition and meaning of Nursing and Biomedical Terminology

### **Nursing Administration and Management**

This course analyzes nursing management across organizational settings and compares management practice across settings. Students develop collaborative managerial and writing skills.

### **Nursing Theories and Nursing Care Delivery Systems**

This course will explore the conceptual and theoretical basis of nursing. Selected conceptual models of nursing will be analyzed with emphasis on implications for nursing practice. Interrelationships among theories, practice and research will be stressed.

This course focuses on the operational models for patient care delivery, which support professional nursing practice. The organization of patient care is addressed in ways that enable nursing to be attractive and viable in an environment of high technology and constant change.

### **Occupational Health**

This course addresses all levels of prevention within the scope of occupational health nursing practice. Program and policy issues are discussed using as examples the health needs of working populations such as women, shift workers and disabled workers, adolescents and aging workers. The importance of drawing on existing knowledge and research findings is emphasized, particularly as it relates to the occupational health nursing role in practice and policy decisions.

### **Organization and Management of Nursing Care Plan**

This course aims to develop students' competence in making nursing care plans, that document health care that Nurses are accountable for. A nursing care plan is based on the nurse/ person /family /community therapeutic interaction, and is targeted on the provision of evidence based, quality continuous care. Nursing Process, internationally recognized nursing standards, and the standardized nursing terminology, are used for organizing care and documenting nursing assessment, nursing diagnoses, desired outcomes, nursing interventions (independent and collaborative) and care outcomes' evaluation. Special consideration will be given in the development of students' critical thinking for the initial and continuous collection of subjective and objective data. Management of person-centered holistic nursing care plans, using the methods of observation, interviewing, and clinical examination is emphasized.

### **Oncology Nursing**

This course provides the student with the knowledge and understanding of concepts essential to oncology nursing. Current knowledge and research in principles of carcinogenesis and therapeutics of cancer treatment, psychosocial responses to cancer and the quality of life of the individual with cancer, and the care of the terminally ill patient (palliative care) will be presented. Ethical, legal and health care system issues which influence nursing practice in oncology will be addressed.

### **Oxygen Therapy and Mechanical Ventilation**

The aim of the course is to introduce the principles and practice of oxygen administration in the common clinical practice. It includes the mechanisms of action of oxygen under norm baric and hyperbaric conditions, the appropriate indications and contraindications as well as the complications that must be avoided. Specific emphasis is given on the safe application of oxygen under pressure in an effort to treat certain diving accidents and medical disorders, according to

the approved indications. Also, the course underlines the role of the nursing staff, which is very important in patient management.

The aim of this course is to introduce and teach the principles of mechanical assistance of the ventilation in emergency and critical care setting. Specifically, the aim of the course is to help students to understand how a ventilator works, when and how mechanical ventilation is implemented in acute medicine. Another aim is to make mechanical ventilation easy and familiar to nursing students and give clinical skills for the everyday practice of mechanical ventilation.

#### **Palliative Care**

The course will provide students with the appropriate knowledge skills and attitudes to offer therapeutic supportive and palliative nursing care. The focus will be on understanding the philosophy and principles underpinning palliative care that is an approach that improves the quality of life of patients and families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual. Special emphasis is given to enhance students' appreciation for a team approach to patient care, especially for the terminal patient.

#### **Pediatrics**

The purpose of the course is to provide a basic knowledge of pediatric theory and practice necessary for practicing scientific nursing care. Emphasis is given to the special needs of newborn infants, children and adolescents with reference to physical, emotional, mental health and performance.

#### **Pediatric Nursing**

This course focuses on the unique health and developmental needs of infants, children and adolescents. The goal of the course is to develop perspectives on health and illness in children emphasizing family-centered care that incorporates screening, teaching and health counseling. The students will use the nursing process to provide comprehensive care to children.

#### **Pharmacology - Clinical Pharmacology**

The aim of the courses are to provide students with the necessary knowledge in order to understand the mechanism of action of drugs, their interactions with the biological substrate and their applications in diseases prevention, diagnosis and therapy.

#### **Physiology I, II**

The study of the functions of the human body and its components and the chemical and physical processes involved.

#### **Psychiatric**

The course includes introduction of psychopathology, taxonomic system concerning mental health, discussion of the organic, psychodynamic and social factors of mental illness, rehabilitation, prevention. The course is delivered through lectures and video tapes presenting case studies.

#### **Pulmonology-Nursing of Pulmonary Diseases**

The aim of the course is to teach common pulmonary diseases regarding aetiology, epidemiology, pathophysiology, clinical presentation, diagnosis and treatment. Specific emphasis is given on necessary knowledge and procedures regarding nursing diagnosis and provides nursing skills in the process of care, management and treatment in patients having pulmonary diseases.

#### **Rehabilitation Nursing of Patients with Chronic Diseases**

The course will consider the very complex needs of patients with chronic diseases. The care of these individuals will be considered across care settings with particular emphasis to the age span.

#### **Research Methodology and Evidence Based in Nursing**

The aim of the course is to teach the principles of scientific knowledge. Topics examined within the framework of the course include Epistemology as metatheory of science. Classification of

sciences, the analysis of structure and function of scientific knowledge. Hypothesis, theories, concepts, scientific explanation and prognosis and the design of scientific studies and analysis of data.

This course provides an introduction to evidence-based practice and critical appraisal of best evidence literature. Students learn to formulate clinical questions in answerable format, search for and identify best evidence and appraise that evidence for rigor and applicability to a clinical problem. Best evidence consists of pre-appraised individual studies and overviews. Basic principles of scientific inquiry, quantitative and qualitative research methods and research ethics are introduced in the context of clinically relevant research.

### **Surgery and Physical Examination – OSCE (Objective Structured Clinical Examination)**

The aim of these courses is to present the essential theoretical background related to surgical indications and classifications of general physical assessment with emphasis on fluid and electrolyte balance and disturbances, nutritional status, respiratory status, cardiovascular status, hepatic and renal function, immunologic function and previous medication therapy. The concept of informed consent and family considerations are presented.

### **Surgical Nursing I, II**

The purpose of these courses is to allow students to explore the needs of adults in the surgical setting. It aims to facilitate students applying the knowledge gained from previous courses to clinical practice. The course focuses on concepts related to care of the adult with acute care needs particularly in relation to surgical nursing from the time the patient is prepared for and instructed about the forthcoming surgical procedure, through the immediate preoperative period, into the operative phase and the recovery from anesthesia and convalescence of these individuals. Attention focuses on the psychological as well as the physiological reactions of the patient.

### **Transcultural Nursing**

This course explores how professional nursing interacts with the concept of culture. It is a specific cognitive specialty in nursing that focuses on global cultures and comparative cultural caring, health, and nursing phenomena. It is a body of knowledge based in anthropology and supported by nursing theory, research, and practice. The goals of transcultural nursing care is to give culturally congruent nursing care, and to provide culture specific and universal nursing care practices for the health and well-being of people or to aid them in facing adverse human conditions, illness or death in culturally meaningful ways.