

## Degree in Nursing

Teaching: HUMAN SCIENCES AND HEALTH PROMOTION

SSD: MED/02, M-PED/01, M-DEA/01, MED/36, SPS/07, MED/42, M-PSI/01

CFU: 8

Coordinator: Adriano Acciarino

email: [adriano.acciarino@unicamillus.org](mailto:adriano.acciarino@unicamillus.org)

Module: DIAGNOSTIC IMAGING AND RADIOTHERAPY

SSD Course: MED/36

Credits: 1

Professor's Name: Pasquarelli Roberto

e-mail: [roberto.pasquarelli@unicamillus.org](mailto:roberto.pasquarelli@unicamillus.org) [pasquarelli@med.uniroma2.it](mailto:pasquarelli@med.uniroma2.it)

Module: GENERAL APPLIED HYGIENE

SSD Course: MED/42

Credits: 1

Professor's Name: FAUSTO CICCACCI

e-mail: [fausto.ciccacci@unicamillus.org](mailto:fausto.ciccacci@unicamillus.org)

Module: DEMO-ETHNOANTROPOLOGICALDISCIPLINES

SSD Course: M-Dea/01

Credits: 1

Professor's name: De Laurentiis Michele

e-mail: [michele.delarentiis@unicamillus.org](mailto:michele.delarentiis@unicamillus.org)

Module: GENERAL AND SOCIAL PEDAGOGY

SSD Course: M-PED/01

Credits: 1

Professor's Name: Adriano Acciarino

e-mail: [adriano.acciarino@unicamillus.org](mailto:adriano.acciarino@unicamillus.org)

Module: GENERAL PSYCOLOGY

SSD Insegnamento: M-Psi/01

Numero di CFU: 2 CFU (1 CFU Donatella Marazziti + 1 CFU Armando Piccinni)

Professor's name: Donatella Marazziti, Armando Piccinni

e-mail: [donatella.marazziti@unicamillus.org](mailto:donatella.marazziti@unicamillus.org) [armando.piccinni@unicamillus.org](mailto:armando.piccinni@unicamillus.org)

Module: GENERAL SOCIOLOGY

SSD Course: Sps07

Credits: 1

Professor's name: Ugo Pacifici Noja

e-mail: [ugo.pacificinoja@gmail.com](mailto:ugo.pacificinoja@gmail.com)

Module: HISTORY OF MEDICINE

SSD Course: Med/02

Credits: 1

Professor's Name: Corvese Francesco

e-mail: [fcorvese.uro@gmail.com](mailto:fcorvese.uro@gmail.com)

## PREREQUISITES

Elements of Physics, Biology, Anatomy and a basic history preparation is needed with reference to the socio-cultural aspects of the different eras from prehistory to the present day

## LEARNING OBJECTIVES

Aim of the Teaching is:

- to provide students with knowledge on the basic concepts for acquiring information on Diagnostic Imaging and Radiotherapy equipment and their indications, as well as providing the basic notions of Radiation Protection.
- to provide students with knowledge on the aims of the health system and organizational models at international, national and local level.
- to provide students with knowledge on the theoretical bases of the Demo-ethno-anthropological disciplines, Medical Anthropology as specific discipline, and the understanding of importance of these disciplines in the context of clinical practice.
- Provide students with key concepts developed within the Demo-ethno-anthropological disciplines and Medical Anthropology: culture as process and cultural encounter in health care practice; illness and disease, health and wellbeing, health systems and body in the socio-cultural context and from the Medical Anthropology perspective.
- to provide students with knowledge on fully understand the fundamentals of modern pedagogy, starting from its birth and going throughout all its changes.
- to achieve a solid preparation in theoretical, design and operational fields of psychology, including innovative research techniques.
- Achieve ability to use cognitive and intervention tools aimed at prevention, diagnosis and rehabilitation and psychological support activities.
- Acquire advanced level skills to establish relevant characteristics of people, families and groups. Acquire the ability to plan relational interventions and to manage congruent interactions with the needs of people, families and groups.
- Acquire the ability to assess the quality, effectiveness and appropriateness of interventions.
- Being able to take responsibility for interventions, to exercise full professional autonomy and to work collaboratively in multidisciplinary groups. To acquire knowledge on the main IT tools and on the electronic communication in the specific areas of competence.
- to provide students with knowledge on basic concepts of general sociology must have been learnt.
- In particular students have to be able to answer to all the questions concerning the beginning of sociology in particular starting from Auguste Comte to the modern sociologists e.g. Bourdieu What a group is. Primary and secondary groups. What are social classes. The state. The institutions. The globalization. Values. Madeleine Leininger and the transcultural nursing.
- to provide students with knowledge on the evolution of medical thought from prehistory to the present day with a particular attention to how medicine in different ages has been influenced by social, economic, religious and political factors, since each time these factors have led to an improvement or a worsening of the medical art.

## LEARNING OUTCOMES

### knowledge and understanding

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

- apply the acquired knowledge on the topics of Diagnostic Imaging, Radiotherapy and Radiation Protection
- principles and objectives of the healthcare organization;
- models of organization of the health service;
- levels of assistance;
- hospital organization;
- principles of socio-health integration and its applications
- examples of services on the field;
- health planning mechanisms at national and regional level;
- fundamentals and principles of health planning at the international level.
- Capturing the complexity of a holistic approach to the patient and the profession
- Recognizing the possible critical issues related to the context of his/her own culture belonging and/or the one of the patients
- Knowing how to grasp the critical points from a demo-ethno-anthropological point of view in the clinical practice
- Knowing the fundamental principles that distinguish/affirm his/her own role from a demo-ethno-anthropological point of view
- Adding valuing to his/her own professionalism through a practice that respects the principles of cross-culturality
- Know the history of Pedagogy.
- Understanding the basic theory and practice of general and social pedagogy.
- Master the fundamental practical skills of Pedagogy.
- explain how sociology was born and how sociology changes from the beginning until now;
- know the classification criteria of social groups;
- describe what sociology is nowadays and which are the practical applications of sociology at our days;
- to explain what social classes are;
- to understand which is the role of institutions;
- what a global society is;
- which is the model proposed from Madeleine Leininger for what concerns the modern nursing;
- explain what the axiological system is.
- Describe the social, political and cultural aspects of the different eras of history
- Know the personal history of the doctors and their findings
- Know the sources from which we have obtained information on ancient medical art
- Describe the complex historical paths of medical discoveries

### Applying knowledge and understanding

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

- apply the acquired knowledge on the topics of Diagnostic Imaging, Radiotherapy and Radiation Protection,

- use the knowledge acquired in the context of his profession, in order to include his work in the global framework of the health system. It will also have the means to recognize the specific role of its professional profile in the organization and planning of the health intervention
- Recognize some of his/her own principles and categories of belonging and prejudice
- Analyze the possible critical issues when interacting with patients as human beings
- Propose and apply strategies that facilitate health professional - patient relationships acting on the soft skills level.
- Propose and apply strategies that help the healing processes acting on the soft-skills level
- Apply knowledge of pedagogy to understand the mechanisms underlying teaching and learning.
- Apply the integrated knowledge of Psychology and Sociology applicable to teaching.
- Apply the systematic and updated acquisitions in the various sectors of psychological disciplines, as well as the biological (molecular, metabolic, physiological) and clinical (neurological, psychiatric, neuroradiological) disciplines that are at the basis of knowledge about psychic processes, and of anthropological and epistemological disciplines and fundamental ethics for understanding the cultural and deontological dimension of interventions for the promotion, maintenance and recovery of health and well-being conditions within public and private institutions for individuals in all phases of life.
- acquired operational and application skills, including psycho-diagnostic and psychological counseling, for people suffering from physical and mental, cognitive and emotional disorders
- Operate in institutions, companies and public and private organizations, in dependence or freelance, usually in multidisciplinary teams in the area of science and psychological techniques.
- to apply sociological concepts to his/her professional life

### **Communication skills**

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

- adequately explain to the teachers the acquired knowledge of the topics addressed during the course.
- use the terminology acquired with competence and appropriateness.
- Know the basics of health professional -patient communication
- Know in particular the basics of non-verbal communication
- Adapt his/her cultural skills to the context of action
- Know at least an effective verbal communication strategy in patient management
- Use a correct scientific lexicon in Pedagogy
- use the updated tools for communication and management of information, experience and professional skills in the field of services aimed at people, groups, organizations and communities.
- Use specific terminology appropriately
- use appropriate sociological terms
- expose the various topics covered

### **Making judgements**

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

- judge independently the applicability of the theoretical notions learned during the course.
- carry out general assessments on the topics covered.

- Recognizing one's own cultural and professional prejudices
- Recognize the critical issues related to the patient's cultural prejudices regarding the demography-ethno-anthropological context of clinical practice
- Preventing critical issues by adopting appropriate behaviors
- Judge the functionality or non-functionality of a pedagogical context.
- carry out general evaluations of the topics covered.
- classify primary or secondary groups according to his/hers needs
- make general assessments of the topics covered

## **COURSE SYLLABUS**

### **DIAGNOSTIC IMAGING AND RADIOTHERAPY**

#### **- EQUIPMENT:**

Physical foundations, equipment technicians and main clinical indications: Ultrasound (US); analogic/digital radiology (RX); Computerized Bone Mineralometry (CBM); Mammography (MX); Computed Tomography (CT); Magnetic Resonance (MR); Nuclear Medicine (NM); Hybrid equipment (PET/CT); Interventional Radiology (IR); Radiotherapy (RT).

#### **- RADIATIONS:**

Natural and artificial sources of radiation. Non-Ionizing Radiation (NIR) and Ionizing Radiation (IR). Radioactivity and radioactive decay.

#### **- RADIOBIOLOGY:**

biological effects of ionizing radiation on the human species; Tissue Radiosensitivity Scale; stochastic, deterministic and genetic effects; Acute irradiation syndrome.

#### **- RADIATION PROTECTION:**

Historical and legislative premises; National and international organizations for radiation protection; The Ethical Principles of Radioprotection; Dosimetric quantities and Dosimetry; Physical Surveillance; Medical Surveillance; General and specific norms of Radioprotection; Devices for Protection against Ionizing Radiation (individual, collective, environmental); Irradiation, Contamination and Decontamination. Disposal of Radioactive Waste.

#### **- RADIATION PROTECTION IN FERTILE AGE AND IN PREGNANCY:**

Normative; Effects on the product of conception.

#### **- HOSPITAL INFORMATIC SYSTEMS AND TELERADIOLOGY.**

#### **- ROLE OF NURSE IN INTERVENTIONAL RADIOLOGY-REFERENCES OF LEGISLATION OF RADIOPROTEZIONISTIC INTEREST:**

Presidential Decree n. 185/1964; Legislative Decree 19/9/1994, n. 626; Legislative Decree 17/3/1995, 230; Legislative Decree 26/5/2000, n.187; Legislative Decree 9/4/2008, n. 81; Directive 2013/59 / EURATOM.

### **GENERAL APPLIED HYGIENE**

#### **ORGANIZATION AND PLANNING IN HEALTH:**

principles and aims of health organization; organization models of health service; levels of assistance; organization of the hospital; social and health integration; local services; health planning at national and regional level; international health planning.

### **Demo-Ethno-Anthropological Disciplines**

Introduction to Social and Cultural Anthropology; Introduction to Medical Anthropology; Illness, disease and its narration; Complex health systems and Biomedicine; social suffering and health as social product; body and embodiment; audiovisual supports and case studies; slides and collection of scientific papers.

### **GENERAL AND SOCIAL PEDAGOGY**

Basics of communication, Introduction to the THYME and SAGE models.

Introduction to the study of Pedagogy's foundations. History of Pedagogy, teaching methods, theoretical and practical aspects of the subject.

### **GENERAL PSYCHOLOGY**

#### **- GENERAL PRINCIPLES OF PSYCHOLOGY**

What is psychology? History of psychology

Main psychological perspectives social psychology

#### **- NEUROSCIENTIFIC FOUNDATION OF PSYCHOLOGY**

The brain: principles of anatomy and of physiology.

Functions, emotions and behaviors

#### **- HIGHER MENTAL FUNCTION Higher mental functions**

Thinking

Language

Intelligence

Consciousness

Learning

Memory

#### **- LIFESPAN DEVELOPMENT**

Prenatal psychology

Developmental psychology

Childhood Psychology

Adulthood Psychology

Death psychology

#### **- PERSONALITY THEORIES**

#### **- PSYCHOPATHOLOGICAL DISORDERS**

Anxiety disorders

Mood disorders

Psychotic disorders

### **GENERAL SOCIOLOGY**

Beginning of sociology; Society; Groups; Social Sciences; Institutions; Social Methodology; Social changes; to understand; to observe; Social classes; personal problems and public "problems"; models of life; life as a theatre; inequalities; communication; culture; identity; mass culture; institutions; Role of the institutions.

### **HISTORY OF MEDICINE**

- Medicine in prehistory
- Ancient Egypt

- Medicine at the Assyrian-Babylonian
- Etruscan medicine
- Medicine in Crete and Mycenae
- Ancient Greek medicine: the preippocratic period, the Asclepiei
- Hippocrates
- Medicine in Alexandria, Egypt
- Medicine in ancient Rome
- Galen
- Medicine during the Arab domination
- The Middle Ages and monastic medicine
- The secular schools of the Middle Ages: Salerno and Montpellier schools
- The universities of the Middle Ages
- Leonardo da Vinci and Humanism
- The Renaissance and the discovery of blood circulation (Berengario da Carpi, Andrea Vesalius, Giovanni Canano, Andrea Cesalpino, William Harvey)
- Renaissance medicine
- The mechanistic theory of Galileo Galilei
- Marcello Malpighi and the beginning of microscopic anatomy
- G.B. Vico: the experimental method
- Live infection and spontaneous generation: the origins of epidemiology
- G.B. Morgagni: the anatomo-scientific method
- Lazzaro Spallanzani, J.L. Pasteur, Robrt Kock, J. Lister and the antiseptis
- The discoveries of medicine in the nineteenth and twentieth centuries

## **COURSE STRUCTURE**

The module of Diagnostic Imaging and radiotherapy is structured in lessons performed with powerpoint presentations for a total of 14 hours of frontal teaching.

The module of General Applied Hygiene is structured in 14 hours of frontal teaching structured in lessons lasting between 2 and 4 hours based on the academic calendar.

The lectures will include theoretical lessons and seminars of case studies.

The module of Demo-Ethno Antopological Disciplines is structured in 14 hours of teaching, divided into 5x2/3 hour lessons as per academic calendar. Students will be provided with theoretical skills and with audiovisual supports. The themes of the lessons will be discussed and students will be required to interact effectively working in groups.

The module of General and Social Pedagogy is structured in 14 hours of frontal lectures.

The module of General Psychology is structured in 28 hours of frontal teaching, divided into lessons from 2 to 4 hours according to the academic calendar. Lectures will include theoretical lessons and possible seminars on the topics covered

The module of General Sociology is structured in 14 hours of lectures which will be divided in lessons of one hour each according to the academic calendar.



The module of History of Medicine is structured in 14 hours of frontal teaching, divided into lessons of 2 or 3 hours according to the academic calendar. Lectures will include theoretical lessons and supplementary seminars on the topics covered.

### **COURSE GRADE DETERMINATION**

The exam of the Teaching of Human Sciences and Health Promotion is comprised of an exam of the modules of DIAGNOSTIC IMAGING AND RADIOTHERAPY, GENERAL AND APPLIED HYGIENE, DEMO-ETHNO ANTROPOLOGICAL DISCIPLINES, GENERAL AND SOCIAL PEDAGOGY, GENERAL PSYCHOLOGY, GENERAL SOCIOLOGY, HISTORY OF MEDICINE, whose marks are an integral part of the Teaching. The knowledge and ability to understand, the ability to apply knowledge and understanding, the autonomy of judgment and the communication skills of the student will weigh in the final score as follows 25%, 25%, 25% and 25%, respectively.

**DIAGNOSTIC IMAGING AND RADIOTHERAPY EXAM:** The oral examination will carry out in order to even evaluate the dialectic and reasoning capacities of the student

**GENERAL APPLIED HYGIENE EXAM:** The evaluation of the achievement of the educational objectives will be performed with a written exam, followed by an oral exam. The written test will consist of 15 questions with multiple choice answers. For each correct answer 2 points will be awarded and the final grade will be given by the sum of the scores of the individual questions. To access the oral exam, the student must have obtained a mark in the written test of at least 14 points.

**DEMO ETHNO ANTROPOLOGICAL DISCIPLINES EXAM:** The verification of the preparation of the students will take place with a written exam followed by an oral test: anyway, two specific moments of preparation for the exam are planned during the course itself. The written test will consist of 10 closed-ended questions: one point will be awarded for each correct answer. Then there will be three open-ended questions: these answers will be evaluated with a score from 1 to 4. The final score of the written test will be given by the sum of the partial scores assigned to each question correctly answered plus the score relative to the open questions. To access the oral exam the student must have totaled at least a minimum of 18 points. The oral exam will be based on the answers to the three open questions.

**GENERAL AND SOCIAL PEDAGOGY EXAM:** The final evaluation consists of a 16 multiple choice questions test, and the possibility of an oral integration.

**GENERAL PSYCHOLOGY EXAM:** The verification of the preparation of the students will take place with an oral exam.

**GENERAL SOCIOLOGY EXAM:** The verification of the preparation of the students will be made by a written test which will be composed of 30 multiple choice questions. Every correct answer will receive one point. To be admitted to the oral exam each student will have to get 18 points minimum.

**HISTORY OF MEDICINE EXAM:** The verification of the preparation of the students will take place with a written exam followed by an oral exam. The written test will consist of 30 questions with multiple choice answers, for each correct answer a point will be assigned. The final score of the written test will be given



by the sum of the partial scores assigned to each question answered correctly. To access the oral exam the student must have totaled at least a minimum of 18 points.

#### **OPTIONAL ACTIVITIES:**

- Research on specific topics (Internet WEB sites)
- some themes and case studies will be discussed with monographic insights.
- the student will be given the opportunity to participate in seminars, research internships, department internships and monographic courses. The topics of the activities are not subject to examination. Acquisition of the hours allocated occurs only with a mandatory frequency of 100% and suitability is provided.

#### **READING MATERIALS**

- The slides of the lessons will be given to the students by the teacher.
- Donald Joralemon, *Exploring Medical Anthropology*, Pearson Education 2010
- Antonio Damasio,, *The strange order of Things*, Pantheon Books 2018
- Jane Griffiths, *Person-centred communication for emotional support in district nursing: SAGE and THYME model*, in *British Journal of Community Nursing* December 2017 Vol 22, No 12
- *General Psychology: Briefer Course* Editore: Kessinger Pub Co Lingua: Inglese
- Renato Mannheimer-Giorgio Pacifici Europe. *Sociologie di un plurale necessario*. Jaca Book, 2019
- Lectures' slides and scientific articles. Audiovisual material and case studies.
- Luigi Belloni "For the history of medicine" Ed. Forni 1990