UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Public Health and Sanitary Management

2627-3-I0303D017

Aims

Knowledge and Understanding
The Integrated Course in “Public Health and Healthcare Management” provides students with knowledge and understanding of the fundamental principles of clinical epidemiology and evidence-based medicine; the main determinants of health and disease; strategies for disease prevention, health promotion, and risk control; the organization of the National Health Service; the ethical, professional, and regulatory principles governing healthcare professions and the protection of patients. It also provides students with the fundamentals of health economics and healthcare service organization, with particular emphasis on the history, figure, profession and role of the Radiology Technician.

Applying Knowledge and Understanding
Upon completion of the Integrated Course in “Public Health and Healthcare Management”, students should be able to interpret the results of epidemiological and clinical studies relevant to professional practice; apply the principles of hygiene and preventive medicine in different healthcare settings; work in compliance with ethical standards, professional codes of conduct, and professional responsibilities, particularly related to Radiology Technician.; contribute to the organization and operation of healthcare services in their respective professional fields.

Contents

The goal of the course is to provide the student with the cultural basis for the acquisition of full professional competence, according to regulation of the specific professional title: Medical Radiology Technician (DM 745/94)

Detailed program

Introduction to Public Health; the evolution of the concept of health; demographic and epidemiological evolution. Demand and needs for health services. Principles, concepts and tools of epidemiology. Principles and concepts of public health; Public health tools: primary, secondary, tertiary prevention. Public health within health systems. Financing and delivery of public health services.

Health needs analysis; analysis of demand for health services; Epidemiology and evolution of the main diseases and determinants; Data sources; Epidemiological tools for medium-long term planning and programming.
Introduction to statistical inference: estimation and testing of hypotheses. Point and interval sample estimation: the sampling distribution (of the mean) and the confidence intervals. Introduction to statistical testing: the logic of the test, the system of hypotheses, the p-value, the first and second type errors, the power of the test and the relationship between the statistical test and the confidence interval. Different types of statistical tests: tests on means and proportions, tests for paired data, tests of association. Measurements of effect for binary variables and time to event.

Definitions of ethics and deontology and their practical applications; Ethics and technology: the new needs of a technological world; The principle of responsibility; Communication and informed consent; Deontological ethical dilemma: some examples and borderline cases; professional identity and personal world: contrasts, relationships, problems. The main usable organizational models, programming and control systems, the roles of managerial functions.

The course also aims to provide the student with a series of interdisciplinary information which, starting from the basic notions of the disciplines that compose it, provide the necessary elements for healthcare facilities.

The foundations of the regional healthcare system; the organization of the national and regional healthcare organization: bodies and organisms, the methods of organizing a laboratory and a hospital department; personnel and material management methods.

The figure of the Medical Radiology Healthcare Technician and his role within the Healthcare Organization; health professions, university education, professional practice: autonomy and responsibility. The technical health professions.

The TSRM profession: notes on the history of the profession, relevant legislation and jurisprudence, the professional association.

Changes in the healthcare world, in the National Health Service, in legislation, in contracts.

Prerequisites

Teaching form

Teaching takes place in attendance, with frontal lessons and practical exercises

Textbook and teaching resource

Signorelli C (editor). Igiene e Sanità Pubblica. SEU, Roma, 2017

Teachers will provide other educational materials

Semester

Second

Assessment method

Monza
Written and oral test, to evaluate the preparation on the exam program, the ability to organize knowledge and the communication skills in the disciplinary field. The final evaluation will take into account the results obtained in both the written and oral exams.
The written test will consist of:
? open-ended questions with numerical exercises and multiple-choice questions on Clinical Epidemiology
? multiple-choice questions on Health Planning
? multiple-choice questions on Hygiene and Preventive Medicine
The oral test will cover the modules on Professional Ethics and Deontology, Business Economics and Organization and Management and Organization of the Profession. The final evaluation will take into account the results obtained in both the written and oral tests.

Bergamo
Written and oral exam, to evaluate preparation on the exam program, the ability to organize knowledge and communication skills in a disciplinary context. The final evaluation will take into account the results obtained in both the written test and the oral test.
The written test will consist of:
? multiple choice questions on Clinical Epidemiology
? multiple choice questions on Healthcare Planning
? multiple choice questions on Hygiene and Preventive Medicine
? multiple choice questions on Economics and Business Organization
? multiple choice questions and open questions on Management and Organization of the Profession
The oral test will concern the Ethics and Professional Ethics module and possibly the Clinical Epidemiology module if requested by the student. The final evaluation will take into account the results obtained in both the written test and the oral test.

Office hours

By appointment required by mail

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION