UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Health Care and Disease Prevention

2425-1-I0303D005

Aims

The student should be able to:
? describe the history of technological progress applied to medicine
? define and describe the correct behaviors in the specific work environment and illustrate the recommendations and rules aimed at avoiding the development of occupational diseases
? recognize the role and contribution of psychology in the healthcare sector
? know and describe the biological effects of radiation at the atomic, molecular, cellular, tissue and clinical levels.
? acquire adequate knowledge of radiation protection and radiation protection legislation necessary to carry out his profession
? know and apply the contents relating to mobilization and postures to be assumed by the person while carrying out investigations or treatments in the field of Diagnostic Imaging and/or Radiotherapy

Contents

The teaching aims:
? to provide the student with the cultural tools to understand the birth and evolution of medical science and the technology associated with the progress of medical science;
? to provide the student with useful information to promote health in the workplace and to avoid risky behaviors capable of both generating occupational diseases and promoting the transmission of pathologies;
? to provide the student with the rational tools to understand the ethical problems of healthcare activity, including those concerning the relationships between operators and patients and between operators and the working environment;
? to provide the student with knowledge on the biological effects of ionizing radiation
? to provide the student with knowledge of the principles of radiation protection and the related operating rules
? to provide to the student. information regarding the correct management of the patient during investigations or treatments in the field of Diagnostic Imaging and/or Radiotherapy

Detailed program

? Pre-Hippocratic medicine. The birth of rational medicine in the classical world (Hippocrates and his writings, Hellenistic medicine, medical sects, Galen). Medieval medicine (Salernitana Medical School, Monastic Medicine, Arab Medicine). Medicine and scientific revolution (Vesalius, Harvey, iatrochemistry and iatromechanics). Medicine and society between the eighteenth and nineteenth centuries (Ramazzini, Enlightenment medicine, Frank, the use of statistics in medicine and the advent of epidemiology, the birth of public health). The nineteenth-century birth of biomedicine and the main discoveries of the nineteenth century (anesthesia, antisepsis, the development of semiotics and clinics, synthetic drugs). The evolution of the concept of health in the twentieth century (WHO and main international conferences, the birth of universal coverage health systems, the Italian health system). The evolution of medicine in the twentieth century (the pharmacological revolution, evolution of surgery and transplantology, the advent of health technologies).
? Introductory prevention concepts. Classification of Risk Factors. Reference regulatory framework. Obligations and responsibilities within the prevention system. Characteristics, evaluation, management of risks in the healthcare sector. Risks for working mothers. Biological risk. Biomechanical overload. Stress in the workplace. Other occupational risks
? Psychology in the healthcare sector; Introduction to Health Psychology: main paradigms and modern concept of health; Psychological models prevalent in health psychology and relevance in the healthcare sector; Psychological processes relevant to health: stress and coping.
? The biological effects of radiation at the atomic, molecular, cellular, tissue and clinical levels. Stochastic and deterministic effects. Notions of radiopathology. Radiation oncogenesis.
? The doctrine of Radiation Protection. Radiation measurement methods and instruments. Radiation protection of workers: classifications, maximum permissible doses, radiation protection legislation. Environmental radiation protection. Management of radioactive waste. Estimation of doses to patients.
? The helping relationship. The concept of privacy. Universal precautions to be used during radiological investigations or treatments. The mobilization and postures to be assumed by the person while carrying out investigations or treatments in the radiological field. The prevention of falls during investigations or treatments in the radiological field. The recognition/detection of some parameters of the person during the carrying out of investigations or treatments in the radiological field. The measures to be used when carrying out investigations or treatments in the radiological field in the person with:

- infusion therapy
- Oxygen therapy
- indwelling bladder catheter

Prerequisites

Teaching form

Teaching takes place in attendance, with frontal lectures and exercises

Textbook and teaching resource

Cesana G, Riva MA. Medicina e Società. Firenze: Società Editrice Fiorentina, 2017

Bertazzi PA. Medicina del Lavoro. Milano: Raffaello Cortina Editore, 2013

The Teachers will provide additional learning materials

Semester

Second semester

Assessment method

Written exam plus possible oral exam upon request of the teachers or the student.
The written test will consist of:
? multiple choice questions and open questions on Patient Management to check preparation on the exam program and to evaluate communication skills in a disciplinary context
? multiple choice questions on Radiation Protection to check preparation on the exam programme
? Radiobiology multiple choice questions to check preparation on the exam programme
? multiple choice questions on Occupational Medicine to check preparation on the exam programme
? multiple choice questions on the History of Medicine to check your preparation on the exam programme
? in-depth study of a scientific article (Monza) / 2 open questions (Bergamo) in Psychology to check preparation on the exam program and evaluate communication skills in a disciplinary context.

Office hours

By appointement required by mail

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION