



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Applied Medical Sciences

2526-3-H4601D017-H4601D047M

Aims

The aims of the course are:

- Acquisition of the basic elements of the Occupational Medicine and of the prevention system in workplaces;
- Knowledge of main aspects of occupational risks, with special attention to the healthcare context, in order to prevent occupational diseases.
- Evaluate healthcare issues both at the individual and community levels gaining knowledge on epidemiological approaches

Contents

The course provides students with useful information to promote health in the workplaces and to avoid behaviors that may cause occupational diseases.

Additionally, considering epidemiological approaches, the course provides students with useful tools to understand terminology, measures, and study designs for clinical research, including both experimental and observational studies.

Detailed program

- Introduction to the Occupational Medicine and regulatory framework

- Basic notions of prevention and classification of risk factors
- Duties and responsibilities in the prevention system
- Biological risk
- Physical risks
- Chemical risk
- Other risks in the workplace
- Pregnancy and work: risks for pregnant workers
- Risks for healthcare workers
- Introduction to epidemiology, data sources, descriptive epidemiology. Proportions and rates, measures of disease frequency (e.g., incidence, prevalence)
- Analytical epidemiology. Disease trends and relationships with individual, social, and environmental characteristics
- Measures of association and differences with causality. The concept of risk
- Measures of the diagnostic process: Sensitivity, specificity, inter-observer agreement
- Systematic and random errors, confounding, and bias.
- Study designs and indicators related to oral health.
- Artificial intelligence and oral health
- Scientific literature in the field of oral health: Reading, interpreting, and evaluating the results of an epidemiological study.

Prerequisites

No prerequisites

Teaching form

Lectures. The teacher promotes discussion among students on problems related to occupational risks in dental setting, involving students and asking them to reflect on these issues

All classes are conducted in-person in a lecture format: 2 lectures of 5 hours each, held in-person.

Epidemiology part: in-person mode (10 hours total divided into a 4h lecture 2 lectures of 3 hours). Traditional mode (“didattica erogativa – DE”) integrated with an interactive approach (“didattica interattiva – DI”) of collaborative

learning. Use of interactive teaching tools for student engagement (e.g., Mentimeter).

The language is Italian.

Textbook and teaching resource

1. Bertazzi PA. Medicina del Lavoro. Milano: Raffaello Cortina Editore, 2013
2. Learning material provided by the teacher

Semester

2nd semester, 3rd year

Assessment method

Final exam: written test with closed multiple-choice questions with only one correct answer.

Office hours

For the Occupational Medicine section

By appointment only, to be requested via email at michele.riva@unimib.it

For the Epidemiology section

By appointment only, via email at cristina.crocamo@unimib.it

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | PARTNERSHIPS FOR THE GOALS
