

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

# **Public Health and Sanitary Management**

2021-3-I0302D019

#### **Aims**

#### Students will learn:

- fundamentals of Public Health and Public Health practice
- to understand and use healthcare planning tools
- the statistical tools for planning activities of research, by appraising the best evidence-based scientific literature and use of epidemiological data to evaluate the rehabilitation programs
- to describe ethics and deontology rules specific of the profession
- knowledge on management issues regarding healthcare organizations in general and laboratory in particular.
- to describe the theory and how to perform process evaluation and validations and quality controls

#### **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: biomedical laboratory technician (DM 745/94)

#### **Detailed program**

Principle, concepts and methods of public health, evolution of the concept of health, demographic and epidemiologic trends, fundamentals of epidemiology, primary, secondary and tertiary prevention tools, public health and healthcare systems, finance and provision of public health services.

Tools of health and healthcare planning.

Specifically, demographic and epidemiologic trends will be presented and sources of data will be discussed. The use of epidemiologic methods for planning health services

Introduction to inference. Point and interval estimation: sample distribution (of the mean) and confidence intervals. Hypothesis testing: logic of the statistical testing, system of hypothesis, p-value, type I and II errors, power of the test and relation between statistical testing and confidence interval. Different types of tests: tests on means and proportions, paired tests and test for association. Measures of effect for binary and time to event endpoints.

Definitions of Ethics and Deontology and their practical applications. Ethics and technology: the new need of a technological world: the responsibility principle; Communication and Informed consent; Ethics dilemmas and limit-cases; professional identity and personal world: contrasts, relationships, problems

Organizational models, planning and control toools, given under a multidiciplinary approach, applications to diagnostic

#### **Prerequisites**

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#### **Teaching form**

Lectures, exercises

#### **Textbook and teaching resource**

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

Teachers will provide other educational materials

#### Semester

#### Second semester

### **Assessment method**

The final mark, based on the average score obtained by the students during the different evaluations, is set during an oral interview with the student, during which the written tests are scrolled to check mistakes

## Office hours