



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Diagnostic Reasoning

2223-2-F5104P017-F5104P018M

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#### Learning area

METHODS AND TECHNIQUES FOR TREATMENT AND REHABILITATION

#### Learning objectives

Knowledge and understanding

- ? Acquisition of theoretical knowledge of communication and personal relationships in healthcare
- ? Understanding of the psychological, social and cultural variables involved in communication and interaction in healthcare

Applying knowledge and understanding

- ? Understanding of, and intervention on, communication and relational problems in healthcare settings
- ? Mastering of some psycho-educational techniques aimed at improving the quality of relationships and communication in healthcare.

Ability to apply different intervention techniques necessary to improve the quality of relationships and communication healthcare

#### Contents

Diagnostic reasoning according to the Evidence Based Medicine (AEBM) approach: elements of decision analysis, logical and bayesian bases of diagnostic reasoning, main cognitive biases that affect diagnostic reasoning, applications in neuropsychological testing.

## **Detailed program**

- Uncertainty and probability in the health professions (Chap 2 Hunink)
- Coping with uncertainty in decisions: decision trees (Chap 3 Hunink)
- Coping with uncertainty in diagnoses: Sensitivity and specificity of diagnostic tests (Chap 5 Hunink)
- Scientific interpretation of diagnostic testing (Chap 5 Hunink), with application to a case of neuropsychological testing (teacher's materials)
- Cognitive in biases affecting clinical decisions and diagnostic reasoning (Chap 5).

## **Prerequisites**

- Good numeracy skills, good comprehension skills of written english.
- Basic knowledge of probability calculus
- Basic knowledge of the fundamentals of neuropsychological testing and diagnosis.

## **Teaching methods**

- Synchronous lectures wit Wooclap engagement, hands-on training to the building and analysis of computerized decision trees, homework.

## **Assessment methods**

Oral test

## **Textbooks and Reading Materials**

Hunink M, Glasziou P, Siegel J, et al. Decision making in health and medicine. Integrating evidence and values. Cambridge: Cambridge University Press, 2001

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING

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