

COURSE SYLLABUS

Diagnostic Reasoning

2021-2-F5104P017-F5104P018M

Learning area

METHODS AND TECHNIQUES FOR TREATMENT AND REHABILITATION

Learning objectives

Knowledge, Understanding, Use in practice

- Logical and statistical bases of diagnostic reasoning
- Psychological biases that affect diagnostic reasoning
- Application of the logical principles of diagnosis to neuropsychological testing

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: _____

- Scientific interpretation of diagnostic testing _____
- Cognitive in biases affecting clinical decisions and diagnostic reasoning (Chap 5 Hunink and Chap 13, the latter is not mandatory)

Prerequisites

- Good written English Basic knowledge of probability calculus
- Basic knowledge of probability calculus
- Basic knowledge of the fundamentals of neuropsychological testing and diagnosis.
- Availability of a laptop computer

Teaching methods

Videos and online live meetings.

Assessment methods

Computer-based written test with optional oral exam.

The first part of the written test is based on closed-choice questions, for checking the extension of the knowledge of the program's topics.

If the first part is passed, the student will answer to a second part, including some open questions aimed at checking in-depth the understanding, argumentation ability, and analytic skills on some critical topics of the program.

If the written exam is passed, both the teacher and the student have the option to require an oral interview for a still more in-depth evaluation. If neither the teacher nor the student require the oral interview, the vote of the open question section of the written test will end the exam; otherwise, the vote assigned at the end of the oral interview will end the exam.

Textbooks and Reading Materials

- Hunink, M., Glasziou, P. et al. (2014). Decision Making in health and medicine, 2nd edition. Cambridge UP. Chapters 2, 3, 5 e 13 (the latter is not mandatory)
 - Slides
 - Free software Silver Decisions
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