## COURSE UNIT Neuropsychological Assessment HEAD LECTURER Mário Simões ACADEMIC STAFF Adriana Sampaio; Ana Pinheiro; Sandra Freitas

# LEARNING OUTCOMES

The goals of this course are to provide students with in-depth knowledge of the neuropsychological assessment process, protocols and key neuropsychological tests associated with examining different neurocognitive domains, including their positive aspects and limitations. Students are expected to demonstrate sharp capacity to administer, obtain and interpret the results of the neuropsychological evaluation, as well as the ability to articulate and communicate information obtained from the interview, clinical history, and test results in the context of a neuropsychological report. Students should understand the complexity of neuropsychological assessment, and identify technical, psychometric and ethical questions related to the use of instruments and protocols based on the analysis of published theoretical and empirical research.

### **SYLLABUS**

1. Neuropsychological assessment. Basic library of assessment tools, history, principles, objectives, and use. Neurodevelopmental Pediatric Neuropsychology- Main Neurophysiological and Neurodevelopmental Models.

2 Goals, assumptions, advantages and limits, psychometric parameters and investment on neuropsychological assessment instruments.

3. Interview and medical history. Observation.

4. Major domains of Neuropsychological Testing: Intelligence, Memory, Attention, Executive Functions, Visual Perception, Language, Laterality, Orientation.

5. Instruments related to other areas of evaluation: Activities of daily living, emotional functioning, personality.

6. Neuropsychological tests: administration, results, interpretation.

7. Neuropsychological assessment protocols in children, adults and elderly adults.

8. Neuropsychological report.

9. Case studies.

### **TEACHING METHODS**

The classes will follow a lecture style with continuous intervention of the students. Emphasis will be given to the presentation and training with testing materials, analysis of protocols, participation in exercises (in class or in the field) and interpretation of results in small groups. The participation of the students in the class is encouraged.

### **ASSESSMENT METHODS**

Assessment includes three components:

1. Attendance and participation in the classes (10%);

2. Short answer questions about the topics addressed in the course (60%);

3. Individual report about one instrument covered in class (30%).

### BIBLIOGRAPHY

1. Arnett, P. (Ed.) (2012). Secondary influences on neuropsychological test performance. New York: Oxford University Press.

2. Baron, I. S. (2018). Neuropsychological evaluation of the child (2nd ed.). New York: Oxford University Press.

3. Donders, J. (Ed.) (2016). Neuropsychological report writing. New York: Guilford Press.

4. Lezak, M., Howieson, D., Bigler, E., & Tranel, D. (2012). Neuropsychological assessment (5th ed). New York: Oxford University Press.

5. Simões, M. R., Santana, I., & Grupo de Estudos de Envelhecimento Cerebral e Demência (Eds.) (2015). Escalas e Testes na Demência (3ª. edição) [Scales and Tests in Dementia, 3rd ed.]. Lisboa: Novartis.

6. Simões, M.R., Albuquerque, C.P., Pinho, M.S., Vilar, M., Pereira, M., Alberto, I., Santos, M.J.S., Martins, C., Lopes, A.F., Lopes, C., & Moura, O. (2016). Bateria de Avaliação Neuropsicológica de Coimbra (BANC) [Coimbra Neuropsychological Assessment Battery]. Lisboa: Cegoc.

7. Strauss, E., Sherman, E.M.S. & Spreen, O. (2006). A Compendium of neuropsychological tests: Administration, norms, and commentary. New York: Oxford University Press.