Syllabus

Cognitive and behavioral characteristics of pathological and normal brain aging - 51445

Last update 17-11-2016

HU Credits: 2

Degree/Cycle: 2nd degree (Master)

Responsible Department: psychology

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Dr. Tal Shany-Ur

Coordinator Email: shany-ur.tal@mail.huji.ac.il

Coordinator Office Hours: Tuesdays and Thursdays

Teaching Staff: Dr. Tal Shany-Ur
**Course/Module description:**
The course will focus on the cognitive and behavioral presentation and neuropsychological characteristics of neurodegenerative diseases, as opposed to healthy brain aging. Assessment and intervention approaches will be discussed using clinical examples.

**Course/Module aims:**
- To become familiar with the effect of healthy aging on cognition, emotion and behavior.
- To become familiar with the effect of neurodegenerative diseases on cognition and socio-emotional behavior.
- To become familiar with neuropsychological characteristics of patients with different diseases, as well as main assessment methods and differential diagnosis principals.
- To become familiar with risk factors and neuroprotective factors in this domain, as well as with treatment and intervention approaches.

**Learning outcomes - On successful completion of this module, students should be able to:**
- Understand the relationship between age- and disease-related brain changes and cognitive and behavioral changes.
- Recognize the main neurodegenerative disorders based on their cognitive and behavioral characteristics, and to be able distinguish individuals with these disorders from individuals undergoing healthy aging.
- Be familiar with the diagnostic criteria for various neurodegenerative disorders.
- Be familiar with assessment and intervention approaches.

**Attendance requirements(%):**
80%

**Teaching arrangement and method of instruction: Lectures, literature discussions, case presentations**

**Course/Module Content:**
1. Brain changes across the life span, and factors affecting brain development and aging
2. Structural, white matter, and functional connectivity changes in healthy brain aging, and their effect on cognition and behavior.
3. Social, emotional, personality and mood changes in healthy brain aging
4. From normal aging to MCI (mild cognitive impairment)  
5. Cognitive and behavioral characteristics of Alzheimer's disease  
6. Cognitive and behavioral characteristics of frontotemporal lobar degeneration  
7. Cognitive and behavioral characteristics of Primary Progressive Aphasia variants  
8. Cognitive and behavioral characteristics of primarily motor diseases (PD, PSP, ALS, HD)  
9. Neuropsychological assessment in neurodegenerative diseases: case examples and differential diagnosis  
10. Prevention, treatment and intervention approaches, cognitive reserve and neuroplasticity

Required Reading:  
* May be updated throughout the course *  


Additional Reading Material:
**Course/Module evaluation:**
End of year written/oral examination 0 %
Presentation 0 %
Participation in Tutorials 10 %
Project work 75 %
Assignments 15 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

**Additional information:**