# LM-51 - Psychology

| General information | | |
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| Academic subject | Neuropsychology of organic diseases | |
| Degree course | Psychology | |
| Academic Year | I | |
| European Credit Transfer and Accumulation System (ECTS) | 6 | |
| Language | Italian | |
| Academic calendar (starting and ending date) | I semester | |
| Attendance | No | |

| Professor/ Lecturer | |
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| Virtual headquarters | MS TEAMS, code: 95kb8sj |
| Tutoring (time and day) | Friday 10:00-12:00 |

| Syllabus | |
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| Learning Objectives | <ul><li>Neuropsychology is the discipline that addresses cognitive and behavioral processes related to anatomic-physiological mechanisms of the nervous system that underlie their functioning (Umiltà, 1999; Vallar & Papagno, 2019). Neuropsychology has a dual purpose: experimental and clinical. Indeed, while this discipline is used in hospitals among patients with neurological deficits for diagnostic and rehabilitation purposes (clinical neuropsychology), its foundations originate from years of studies and scientific evidence (experimental neuropsychology).</li><li>Clinical neuropsychology aims to assess and, where possible, rehabilitate cognitive deficits and the related psychological, affective, and personality implications resulting from central nervous system diseases.</li></ul><br>The course will focus on:<ul><li>Evaluation: The objective of the neuropsychological evaluation is to identify, describe and quantify the cognitive and behavioral deficits acquired after a brain injury or dysfunction.</li><li>Treatment: Provides for different types of intervention</li><li>Neuropsychological rehabilitation: used to optimize the recovery of damaged cognitive abilities (attention, language, non-verbal verbal communication, actions, perception, memory, visuospatial abilities, reasoning, executive functions, emotions and behavior), facilitate strategies to compensate for deficits and improve the patient's ability to adapt.</li><li>The enhancement of neuropsychological abilities: the set</li></ul> |

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| | of interventions aimed at promoting the acquisition and normal development and enhancement of a cognitive function in evolution. The purpose of this treatment is to reduce the functional consequences of the disorder. |
| **Course prerequisites** | n.a. |
| **Contents** | o CLINICAL INTERVIEW IN NEUROPSYCHOLOGY<br>- Demand analysis and anamnestic data collection<br>- The interview as a "guide" for assessment and treatment in the neuropsychological field<br>o THE NEUROPSYCHOLOGICAL ASSESSMENT<br>- Historical background<br>- Cognitive domains and psychometric tests<br>- The formalized evaluation phase<br>- The neuropsychological assessment at the time of COVID-19<br>o THE NEUROCOGNITIVE DISORDERS<br>- A historical look at dementia<br>- Characteristic manifestations of neurocognitive disorder<br>- Nosography of neurocognitive disorders<br>o MILD COGNITIVE IMPAIRMENT (MCI)<br>- MCI and Alzheimer's disease<br>- Risk factors for the development of MCI<br>- Diagnostic evaluation of MCI<br>o ALZHEIMER'S DISEASE<br>- Criteria for clinical diagnosis<br>- Post-mortem analyses<br>- Tests for neuropsychological evaluation<br>o FRONTOTEMPORAL DEGENERATION<br>- Evidence of neuroanatomy and physiopathology<br>- Cognitive profile for clinical diagnosis<br>- Frontotemporal behavioral variant dementia<br>- Nonfluent Progressive Aphasia and Semantic Dementia<br>- Tests for neuropsychological evaluation<br>o PARKINSON's DISEASE<br>- Evidence of neuroanatomy and physiopathology<br>- Cognitive profile for clinical diagnosis<br>- Neuropsychiatric components in Parkinson's disease<br>- Test for the neuropsychological evaluation<br>o MULTIPLE SCLEROSIS<br>- Evidence of neuroanatomy and physiopathology<br>- Cognitive profile for clinical diagnosis<br>- Test for the neuropsychological evaluation<br>o NEUROCOGNITIVE VASCULAR DISORDER<br>- Evidence of neuroanatomy and physiopathology<br>- Cognitive profile for clinical diagnosis<br>- Test for the diagnostic neuropsychological evaluation<br>o COGNITIVE REHABILITATION<br>- Neuropsychological rehabilitation techniques: memory<br>- Memory training<br>- External memory aids<br>o NEUROPSYCHOLOGY IN THE ONCOLOGICAL FIELD<br>- Psycho-oncology and neuropsychological profiles<br>- Cognitive functions and tasks<br>o AWAKE SURGERY: EXPERIMENTAL FRONTIER OF NEUROPSYCHOLOGY<br>- Awake surgery<br>- Neuroanatomy of eloquent areas<br>- Cognitive functions and tasks<br>- Benefits of Awake surgery<br>o DIFFERENTIAL DIAGNOSIS |
| **Books and bibliography** | - De Caro M.F., Taurisano P., Calia C., Abbatantuono C., Modelli e profili neuropsicologici delle patologie neurodegenerative. Franco Angeli - In press<br>Optional books:<br>− Grossi D., Trojano L., Lineamenti di Neuropsicologia Clinica. Carocci Editore.<br>- Mazzocchi A., La riabilitazione neuropsicologica. Edra Editore |
| **Additional materials** | |

| Work schedule | | | |
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| Total | Lectures | Hands on (Laboratory, working groups, seminars, field trips) | Out-of-class study hours/ Self-study hours |
| **Hours** | | | |
| 40 | 40 | | |
| **ECTS** | | | |
| 6 | 6 | | |
| **Teaching strategy** | | | |
| | The organization of the course includes lectures, group activities and exercises, participation in research activities and seminars with the support of expert researchers and professionals of the discipline. Where consistent with government regulations on public health and safety and with the provisions of the University bodies, teaching may be provided in a technology enhanced mode (remote lessons in addition to frontal lessons). | | |
| **Expected learning outcomes** | | | |
| **Knowledge and understanding on:** | o Knowledge of the main theories;<br>o Knowledge of cognitive and behavioral processes in organic diseases;<br>o Knowledge of the main characteristics and problems of neuropsychological profiles in organic diseases;<br>o Knowledge of the main research methodologies in the field of clinical neuropsychology. | | |
| **Applying knowledge and understanding on:** | o Knowledge and understanding applied to neuropsychological processes in different fields (clinical, and/or research).<br>o Ability to identify strengths and weaknesses | | |
| **Soft skills** | At the end of the course the student must have developed:<br><br>· *Making informed judgments and choices*<br>o Ability to identify the features of a varied array of neuropsychological profiles<br>o Ability to critically read cognition and behavior in the field of clinical neuropsychology | | |

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| | · *Communicating knowledge and understanding*<br>   o  Ability to communicate in a personal, critical, and competent way the contents learned during the course.<br>   o  Ability to expose in an appropriate way to the understanding of experts and not to the works cases of neuropsychology of organic pathologies<br>· *Capacities to continue learning*<br>   o  Reading skills, analysis and communication of research texts, neuropsychological reports.<br>   o  Ability to integrate the knowledge acquired in the course into the analysis of applied cases |

| **Assessment and feedback** | |
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| Methods of assessment | The exam will be oral.<br>Exemptions may be provided. |
| Evaluation criteria | · *The exam will verify the level of mastery of the contents proposed during the course with particular consideration for:*<br>· *Knowledge and understanding*<br>   o  references to the theory<br>· *Applying knowledge and understanding*<br>   o  references to the methodologies and procedures of investigation in clinical neuropsychology<br>· *Autonomy of judgment*<br>   o  the ability to operate conceptual inferences<br>· *Communicating knowledge and understanding*<br>   o  the appropriate use of the lexicon<br>· *Capacities to continue learning*<br>   o  the ability to rework personal content |
| Criteria for assessment and attribution of the final mark | The final grade is awarded out of thirty, with possible honors. The exam is considered passed when the grade is greater than or equal to 18. |
| **Additional information** | |
| | The teaching material (slides, diagrams, research articles, etc.) will be made available to students during the course. |