



Mercoledì 5 Febbraio 2014

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strutture](#)> [Studiare a psicologia](#)> [Personale](#)> [Comunicazioni](#)> [Documenti online](#)> [Link utili](#)> [Specializzazione](#)> [Bandi](#)[Home](#) / [Offerta formativa](#) / [Neuroimaging and brain stimulation](#)**NEUROIMAGING AND BRAIN STIMULATION**

M-PSI/02, 6 crediti

Corsi di laurea / indirizzi:

> Lauree magistrali N.O. DM 17/2010 / [Cognitive neuroscience and clinical neuropsychology \(CN2\)](#)
 Prof. Begliomini Chiara
 Prof. Campana Gianluca
 Prof. Vallesi Antonio
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Inglese

Educational And Training Objectives

The course is conceived to illustrate characteristics, principles and methodological issues related to neuroimaging and brain stimulation techniques mainly used within the context of cognitive neurosciences studies. Data analysis and interpretation issues will be also illustrated.

Pre-requisites

Adequate knowledge of anatomy and principles of the nervous system are required.

Course content

1. Neuroimaging techniques (functional magnetic resonance imaging, fMRI; near-infrared spectroscopy, NIRS)
 - a) principles
 - b) methodological issues
 - c) data analysis and discussion
2. Brain stimulation techniques (transcranial magnetic stimulation, TMS; transcranial electrical stimulation, tES)
 - a) principles
 - b) methodological issues
 - c) data analysis and discussion
3. Coregistration approaches (TMS-fMRI, EEG-fMRI)

Recommended reading

S. A. Huettel, A. W. Song, G. McCarthy. Functional magnetic resonance imaging. SINAUER associates Sunderland USA (2004). Chapters: 2, 3, 5, 6, 7, 8, 10, 11, 12, 13, 15.

Walsh, V., Pascual-Leone, A., Kosslyn, S.M. Transcranial Magnetic Stimulation: A Neurochronometrics of Mind. Bradford Books (2005). Chapters: 1-6.

Teaching methods

Classes will cover all the topics in their general aspects. Students will further explore the themes by using the textbook and the supporting material provided by the teacher (articles in English language). Training classes will be devoted to practically deepen theoretical issues and (possibly) to simulate the final exam.

Assessment methods**Type of examination:** Written with possible oral integration**Written examination:** Multiple choice questions**Notes**

Registration is MANDATORY for both exam and exam registration. Registration must be done ONLY through UNIWEB from 20 to 7 days before the exam.

COMUNICAZIONI AGLI STUDENTI (a cura del docente)

Nessuna comunicazione disponibile.