

***PhD COURSE IN “SCIENCES OF MIND” (XXXIX cycle)
Program***

Year	Activity	Duration (hours)	Description	Notes
I	<i>English for the sciences of the mind and the brain</i>	14	<p>This activity aims to refine and improve the level of scientific English applied to Cognitive Science through a CLIL/CBI (Content and Language Integrated Learning/Content Based Instruction) approach to teaching English for specific purposes. The teaching is based on activities of comprehension, analysis and language production, with a focus on the use of scientific articles and abstracts related to Cognitive Science.</p> <p>The teaching stimulates PhD students to become familiar with the specific language of Cognitive Science, acquiring the communicative skills necessary to understand and organize information and arguments in English.</p>	Includes final exam
I	<i>Methods in Cognitive Neurosciences</i>	14	<p>The aim of the course is to provide doctoral students with the tools to understand the methodologies used in cognitive neuroscience to study the relationships between brain and behaviour. The course provides knowledge on the use of investigative techniques mainly applied to cognitive neuroscience, promoting the development of original ideas and their application in a clinical and research context. The teaching includes modules relating to the description of the following topics:</p> <ul style="list-style-type: none"> -psychophysiological indices, -non-invasive brain stimulation techniques -Computerized eye-tracking -Event-related potentials and EEG 	
I	<i>Methods in Social and Psychological Research</i>	14	<p>This activity aims to provide doctoral students with an introduction to structural equation models (SEM) with a special focus on measurement and structure</p>	

			<p>invariance aspects and their use in psychology research. In addition, some applications of these analyses to psychological research questions in social contexts or analyses of longitudinal data are shown. The applications will be carried out via the AMOS programme. The teaching includes modules on "Introduction to bootstrapping and mediation"; "Application of SEM in developmental psychology with EQS, AMOS and Lavaan package of R: Path analysis, latent variables and mediations with the implementation of the bootstrapping approach", "Cross-sectional factorial invariance and longitudinal factorial invariance in structural equation modelling: theoretical outline and exercise". The course also includes a module on social cognition research.</p>	
I, II, III	Seminars	30	<p>The activity involves a set of seminars moderated by a lecturer who invites researchers and professors from Italian and foreign universities to address topics in Cognitive Science and Behavioural Neuroscience. The seminars are held in English. For each seminar, there is a frontal part in which the expert deals with the topic in question and a second interactive part characterized by a critical discussion between lecturer and PhD students. 10 seminars are scheduled in the first year, 10 seminars in the second year and 10 seminars in the third year. Each interactive seminar corresponds to 1 CFU due to the high level of interaction between lecturer and PhD students in English.</p>	
I	<i>Literature review</i>	7	<p>The 'literature review' course aims to provide the methodological and bibliographical tools useful for setting up a literature review, which can be the starting and finishing tool of a study and research pathway aimed at the elaboration of a doctoral thesis, articles and scientific papers. The course focuses on the methodology used to carry out a systematic literature review and a meta-analysis and encourages PhD students to develop the skills to choose contributions and select sources. Furthermore, doctoral students will develop the ability to write a</p>	Includes final exam

			literature review in all its parts (introduction, materials and methods, results, discussion, conclusions and clinical implications).	
I	<i>Publish or Perish, Publishing in high- impact journal</i>	7	Writing, publishing and disseminating new knowledge is an important part of academic activity also in the field of psychology. Therefore, the wide dissemination of scientific research results depends on the choice and selection of a high-impact peer-reviewed scientific journal in which to publish the paper. The course aims to provide useful tools for exploring the editorial process by proposing recommendations and suggestions for the writing of scientific articles and their submission (and acceptance) in international scientific journals. Specifically, the topics covered are: editorial process, main reasons for manuscript rejection, how to choose the most suitable journal in the field of psychology (consulting WOS, SCOPUS and bibliometric indexes), suggestions on writing a scientific article: preparation of figures and tables, writing, bibliography, title and cover letter.	
I, II	<i>Journal Club</i>	14	The "Journal Club" teaching aims to develop the skills of effective scientific communication in doctoral and post-doctoral students and to develop critical and evaluative skills regarding various research topics in the different fields of psychology. The course consists of lectures in which the lecturer illustrates the different sections of an oral communication (background, objectives, materials and methods, results and conclusion) and practical activities in which the doctoral students practice presenting in English the objectives, methodology and results of studies in the literature on psychology topics of interest to the doctoral programme.	