Course of study in

"SCIENCE AND TECHNOLOGY IN EDUCATION AND CHILDCARE" - [L19].

a.y. 2021/2022

SUBJECT

COGNITIVE-MOTOR NEUROPSYCHOLOGY IN EARLY CHILDHOOD

SDS: MED/39; ECT: 6

III YEAR; II SEMESTER

Lecturer: Prof. **Tiziana Metitieri**

Disciplinary Tutor: Dr **Amanda Grazi**

Qualification and scientific background of the lecturer	**Clinical activity** Neuropsychological diagnosis in neurological, genetic and metabolic pathologies; diagnosis of specific learning disorders; investigation of cognitive-behavioural profiles in epilepsies; development and longitudinal testing of neuropsychological protocols for epilepsies surgery; cognitive development profile; cognitive plusdotation; consultation on rehabilitation, educational and psychological pathways. **Teaching activities** Trainer in I and II level master courses on theories and applications of developmental neuropsychology; contract lecturer (until 2014) and since 2020, tutor in clinical neuropsychology and age-related test assessments at the Postgraduate School in Child Neuropsychiatry, Faculty of Medicine, University of Florence. Scientific publications (selection): ▪ Marini C, Romoli M, Parrini E, Costa C, Mei D, Mari F, Parmeggiani L, Procopio E, **Metitieri T**, Cellini E, Virdò V, De Vita D, Gentile M, Prontera P, Calabresi P, Guerrini R. Clinical features and outcome of 6 new patients carrying de novo KCNB1 gene mutations. *Neurology Genetics, 2017 Dec 11;3(6): e206* ▪ Sibilia V, Barba C**, Metitieri T,** Michelini G, Giordano F, Genitori L, Guerrini R. Cognitive outcome after epilepsy surgery in children: A controlled longitudinal study. *Epilepsy Behav. 2017 Jun 9; 73:23-30* ▪ Viggiano MP, Giovannelli F, Giganti F, Rossi A, **Metitieri T**, Rebai M, Guerrini R, Cincotta M. Age-related differences in audiovisual

	interactions of semantically different stimuli. *Developmental Psychology, Nov 28, 2016; http://dx.doi.org/10.1037/dev0000256* ▪ **Metitieri T**, Barba C, Pellacani S, Viggiano MP, Guerrini R. Making Memories: the development of long-term visual knowledge in children with visual agnosia *Neural Plasticity, 2013; 2013:306432. doi: 10.1155/2013/306432. Epub 2013 Nov 10* ▪ Brancati C, Barba C, **Metitieri T**, Pellacani S, Viggiano MP, Guerrini R. Impaired object identification in idiopathic childhood occipital epilepsy. *Epilepsia, 2012; 53(4):686-694*
Description of contents and subdivision of the programme into teaching modules	**TABLE AND DEFINITION OF CONTENTS** Developmental neuropsychology, through the integration of developmental models of the central nervous system, clinical observation and standardised examinations' techniques and by referring to diagnostic criteria shared by the scientific community, identifies cognitive and motor disorders, provides rehabilitation indications and plans the longitudinal monitoring. Knowledge of these processes enables professionals in childcare to develop the most effective communication strategies and skills to promote integration, contributing to the rehabilitation process. ➢ **Module 1** - Introduction to developmental neuropsychology and assessment tools. ➢ **Module 2** - Neurodevelopmental disorders: diagnostic criteria, rehabilitation indications and clinical cases.
Abstract	Developmental neuropsychology, through the integration of developmental models of the central nervous system, clinical observation and standardised examinations' techniques and by referring to diagnostic criteria shared by the scientific community, identifies cognitive and motor disorders, provides rehabilitation indications and plans the longitudinal monitoring. Knowledge of these processes enables professionals in childcare to develop the most effective communication strategies and skills to promote integration, contributing to the rehabilitation process.
Learning objectives	**LEARNING OBJECTIVES**

	➢ To provide basic knowledge of developmental neuropsychological disorders in their various cognitive, motor and behavioural manifestations. ➢ To introduce the main tools for diagnosis in developmental neuropsychology and the main interventions for early rehabilitation of developmental disorders. ➢ To promote communication and relational skills to interact with children with cognitive, motor and behavioural developmental disorders.
Expected learning outcomes	**A.** Applied knowledge and understanding. **B.** Specialist learning. **C.** Communication and relational skills.
Skills to be acquired	**EXPECTED RESULTS** **A.** Use and critical selection of traditional and digital bibliographic resources. **B.** Development of appropriate skills to interpret specialist information. Application of new skills to clinical case management. **C.** Ability to communicate information, problems and solutions to specialist and non-specialist interlocutors. **D.** Ability to undertake further study with a high degree of autonomy. Students will be guided to arrange their own study and independent research.
Didactics organisation	**DIDACTICS PROVISION** ➢ 4 hours of recorded video lessons available on the platform; ➢ 2 synchronous meetings on the platform; ➢ Podcasts of all the above-mentioned video lessons. **INTERACTIVE DIDACTICS** ➢ 1 course orientation forum; ➢ 2 thematic follow-up forums (1 per module);

	➢ 2 structured *e-activities* (as described in the section **"*in itinere* assessment methods"**). **SELF-LEARNING** Teaching materials are provided for each module: lecturer's articles and slides, open access readings, online resources, reference bibliography, etc.
Recommended examination texts	➢ Vicari, Stefano; Caselli, Maria Cristina, *Neuropsicologia dell'età evolutiva*. Bologna: Il Mulino, 2017 (a selection of chapters). ➢ Pecini, Chiara; Brizzolara, Daniela, *Disturbi e traiettorie atipiche del neurosviluppo*. Milan: McGraw-Hill, 2020 (a selection of chapters)
In itinere assessment methods	Access to the final examination is subject to the following **2 e-activities**: ➢ 1 multimedia thematic report; ➢ 1 glossary on course topics.
Procedure for the final examination	The assessment of learning will take place through an oral interview on the course contents and the papers presented. The grade (min 18, max 30 with possible honours) is determined by the level of performance for each of the following dimensions of the oral interview: mastery of contents, appropriateness of definitions and theoretical references, clarity of argument.
Language of instruction	Italian