

Italian code: M-PSI/08 (old) – PSIC-04/B (new) Credits: 6 Course: NEURODEVELOPMENTAL DISORDERS PSYCHOLOGY: EVALUATION AND EVIDENCE- BASED INTERVENTION MODELS

Main language of instruction: Italian Other language of instruction: English

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Objectives:

The aim of the course is to present an introduction to the main neurodevelopmental disorders throughout the lifespan, namely: Intellectual Disability (Fragile X syndrome, Williams syndrome, Down syndrome), Specific Language Impairment (SLI), Learning Disorders (LD), Autism Spectrum Disorder (ASD), and Attention Deficit Hyperactivity Disorder (ADHD).

The course will focus on central aspects of diagnosis, neuropsychological assessment, and intervention.

Contents:

- Definition and issues of Neurodevelopmental Disorders
- Different profiles in developmental trajectories
- Intellectual Disability: Fragile X syndrome, Williams syndrome, Down syndrome
- Specific Language Impairment (SLI)
- Learning disorders: Dyslexia and Dyscalculia
- Autism Spectrum Disorder (ASD)
- Attention Deficit Hyperactivity Disorder (ADHD)
- Comorbidity in Neurodevelopmental Disorders
- Diagnosis, neuropsychological assessment, and intervention

Competencies:

A. Knowledge and understanding:

By the end of the course, the student will show the acquisition of definitions of neurodevelopmental disorders, the development and profiles of children with



neurodevelopmental disorders, the issues concerning diagnosis, neuropsychological assessment, and possible intervention models.

B. Applying knowledge and understanding:

By exploring the variability between and within neurodevelopmental disorders, the course aims to develop the capability to consider the implications for diagnosis, neuropsychological assessment, and intervention models.

In addition, by illustrating several case studies, the course will show the possible challenges for research in the area of neurodevelopmental disorders.

C. Making judgements:

By the end of the course, the student will be able to discuss and evaluate different explanatory models of causes and outcomes of neurodevelopmental disorders.

D. Communication skills:

By the end of the course, the student will be able to use the scientific terminology corresponding to the concepts illustrated in the references.

E. Learning skills:

Knowing a number of relevant developmental profiles, neuropsychological data, and comorbidity evidence will be useful in more advanced training in the area of neurodevelopmental disorders.

Evaluation system and criteria

The exam is in **written form**, based on three open questions about the contents of the course, as illustrated by the bibliographical references.

In addition, before the exam session, students will have the opportunity to complete the **e-tivity** assigned. The e-tivity will be evaluated with a score ranging from 0 to 3.

Bibliography and resources

The course includes textbooks in English, which the Erasmus student can study for the exam.

1. Suggested readings are:

1.1 JO VAN HERWEGEN, DEBORAH RIBY (2014). *Neurodevelopmental Disorders: Research challenges and solutions,* Psychology Press.



(From the rear cover of the book)

"The volume includes 14 chapters, arranged over three sections. Chapters in the first section address general research challenges for the study of neurodevelopmental disorders. The second section draws upon specific disorders (such as Williams syndrome, Autism Spectrum Disorders, Down Syndrome, Fragile X Syndrome, ADHD, and Language Disorders) to consider the syndrome-specific issues or challenges that may be crucial to advancing our understanding of aspects of cognition and behavior associated with them. The final section considers how research evidence may be translated into practice to begin making an impact upon the lives of individuals who have neurodevelopmental disorders and their families. Each chapter in the book also includes 'practical tips' for either conducting research with individuals who have neurodevelopmental disorders or considering wider practical issues."

1.2 ORSOLINI M., RUGGERINI C. (eds.) (2022). Understanding Intellectual Disability. Routledge. (*N.B. Only the three chapters indicated below*).

(From the rear cover of the book)

"Understanding Intellectual Disability: A Guide for Professionals and Parents supports professionals and parents in understanding critical concepts, correct assessment procedures, delicate and science-infused communication practices and treatment methods concerning children with intellectual disabilities. From a professional perspective, this book relies on developmental neuropsychology and psychiatry to describe relevant measures and qualitative observations when making a diagnosis and explores the importance of involving parents in the reconstruction of a child's developmental history. From a parent's perspective, the book shows how enriched environments can empower children's learning processes, and how working with patients, families, and organizations providing care and treatment services can be effectively integrated with attachment theory. Throughout seven chapters, the book offers an exploration of diagnostic procedures, new insights on the concept of intelligence, and the role of communication and secure attachment in the mind's construction. With expertise from noteworthy scholars in the field, the reader is given an overview of in-depth assessment and intervention practices illustrated by several case studies and examples, as well as a lifespan perspective from a Human Rights Model of disability. Understanding Intellectual Disability is an accessible guide offering an up-to-date vision of intellectual disability and is essential for psychologists, health care professionals, special educators, students in clinical psychology, and parents."



Chapters:

- Orsolini M. Federico F., Melogno S. (2022). Is intelligence a general mental capacity? 34-63.

- Orsolini M., **Melogno S**. (2022). Intervention to empower children's learning. 102-139.

- Orsolini M., Conforti S., **Melogno S.** (2022). Assessment of children with developmental delays and intellectual disability. 64-102.

1.3. Articles:

- Orsolini M., **Melogno S.**, Latini N., Penge R., Conforti S., (2015). Treating verbal working memory in a case with intellectual disability and a severe difficulty in addressing verbal dual tasks, *Frontiers in Psychology*, DOI.10.3389.psyg.2015.01091

- **Melogno S** Pinto M A (2022) Devising trainings to enhance the canabilities of children with Autism Spectrum Disorder to cone with metaphor: a review of the literature. *Frontiers Communication, 7, 915873, doi:*10.3389/fcomm.2022.915873

2. Other materials are also available in Italian.