



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Technological Seminars

2122-2-I0202D015

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#### Aims

The seminar aims to examine in depth the knowledge about the development of motor control, of body image, of dominance, laterality and lateralization. Moreover, the topic of graphomotricity will be studied in depth: from scribble to representation.

#### Contents

LATERALITY AND GRAPHISM: To analyze in depth neurobiological mechanisms and developmental course of motor control, dominance, lateralization and laterality. To study the development of body image. To highlight the development stages of graphism.

#### Detailed program

LATERALITY AND GRAPHISM

Origin of movement and neurobiology of motor control

Body schema and Body image

Perception-action-cognition cycle

The role of visual function in motor control

Dominance, lateralization and laterality

Evolution of graphomotoricity (scribbling, drawing, writing)

Meaning and symbolism in children's drawing

## **Prerequisites**

Objectives of the first year courses

## **Teaching form**

Lectures and Tutorials

In the Covid-19 emergency period, lessons will be held remotely asynchronously with synchronous videoconferencing events

## **Textbook and teaching resource**

Slides from teacher

Von Hofsten C. *Action, the foundation for cognitive development*. Scand J Psychol. 2009 Dec;50(6):617-23. doi: 10.1111/j.1467-9450.2009.00780.x. PMID: 19930261.

Purpura G, Tinelli F. *The development of vision between nature and nurture: clinical implications from visual neuroscience*. Childs Nerv Syst. 2020 May;36(5):911-917. doi: 10.1007/s00381-020-04554-1. Epub 2020 Mar 5. PMID: 32140777.

Amann-Gainotti M, Antenore C. *Development of internal body image from childhood to early adolescence*. Percept Mot Skills. 1990 Oct;71(2):387-93. doi: 10.2466/pms.1990.71.2.387. PMID: 2251074.

## **Semester**

Second Semester

## **Assessment method**

Attendance

**Office hours**

By appointment

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