

COURSE DETAIL

COGNITION, BRAIN AND BEHAVIOR: MULTISENSORY INTEGRATION

Country

Italy

Host Institution

University of Bologna

Program(s)

University of Bologna

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Psychology

UCEAP Course Number

183

UCEAP Course Suffix**UCEAP Official Title**

COGNITION, BRAIN AND BEHAVIOR: MULTISENSORY INTEGRATION

UCEAP Transcript Title

COGNITN BRAIN BHVOR

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course is part of the Laurea Magistrale degree program and is intended for advanced level students. Enrollment is by permission of the instructor. This course provides students with the advanced knowledge of the mechanisms underlying perception and multisensory integration. Students are able to understand the perceptual and behavioral consequences of multisensory integration and the key determinants of these intersensory bindings: the role of attention on cross-modal perception and multisensory integration; the multisensory brain's representation of the body and of peri-personal space and the cortical plasticity across sensory modalities and the effects of sensory deprivation.

The course describes and evaluates the results of recent research on multisensory integration. First, the mechanisms underlying multisensory integration are outlined. It then examines the perception of multisensory events, the advantages afforded by the ability to combine different sensory modalities and the key determinants of intersensory interactions. Another key question addressed is how multisensory interactions are linked to and modulated by attention, specifically considering the latest evidence assessing the role of exogenous and endogenous attentional mechanisms on cross-modal processes. In addition, there is a focus on recent research concerning how multisensory information is used to create multiple spatial representations of our body parts and of the spaces within which they can act. We see how these representations that are used to guide body movements through space show a considerable degree of plasticity. Finally, we consider how the cortical system for perception may become radically reorganized after sensory deprivation and evaluate this surprising degree of cross-modal plasticity.

Language(s) of Instruction

English

Host Institution Course Number

B8886,95700

Host Institution Course Title

COGNITION, BRAIN AND BEHAVIOR: MULTISENSORY INTEGRATION (1) (LM)

Host Institution Course Details

<https://www.unibo.it/en/study/course-units-transferable-skills-moocs/course-uni...>

Host Institution Campus

BOLOGNA

Host Institution Faculty

Host Institution Degree

LM in SEMIOTICS

Host Institution Department

PHILOSOPHY

Course Last Reviewed

2025-2026

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