COURSE DETAIL

DEVELOPMENTAL COGNITIVE NEUROSCIENCE

Country

Netherlands

Host Institution

Maastricht University - Center for European Studies

Program(s)

Psychology and Neuroscience, Maastricht

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Health Sciences Biological Sciences

UCEAP Course Number

140

UCEAP Course Suffix

Α

UCEAP Official Title

DEVELOPMENTAL COGNITIVE NEUROSCIENCE

UCEAP Transcript Title

DEV COGN NEUROSCI

UCEAP Quarter Units

8.50

UCEAP Semester Units

Course Description

This version of the Developmental Cognitive Neuroscience includes an Independent Study Project (ISP) done under the direction of the instructor. The minimum reading is between 20 and 25 articles from established academic periodicals/magazines. The ISP is 10-12 pages and counts for 1/3 of the overall grade for the course. In this course, students learn to use neuroscience methods to study the cognitive development of infants, children, and adolescents. The course begins with the various methods used in developmental cognitive neuroscience, such as pediatric and infant MRI, EEG, and fNIRS. In this context, students uncover and discuss the benefits and challenges of each approach and the feasibility of studying different age ranges. The course then examines typical brain development as assessed with in vivo MRI (including trajectories of white & gray matter over the life span). Next, are more specific aspects of cognitive development such as the development of visual processes where students learn how learning to read affects the brain and how regions involved in face processing develop throughout childhood to support important social functions such as face recognition. Topics are approached using a mix of formats including active participation, working in subgroups, presentations, short lectures, and videos.

Language(s) of Instruction

English

Host Institution Course Number

PNE2007

Host Institution Course Title

DEVELOPMENTAL COGNITIVE NEUROSCIENCE

Host Institution Campus

Maastricht University

Host Institution Faculty

Center for European Studies

Host Institution Degree

Host Institution Department

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