COURSE DETAIL

NEUROSCIENCE OF ACTION

Country

Netherlands

Host Institution

Maastricht University - Center for European Studies

Program(s)

Biological and Life Sciences, Public Health and Pre-Med, Biological and Life Sciences, Maastricht

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

111

UCEAP Course Suffix

UCEAP Official Title

NEUROSCIENCE OF ACTION

UCEAP Transcript Title

NEUROSCIENCE ACTION

UCEAP Quarter Units

6.00

UCEAP Semester Units

Course Description

The most general function of our brain is to interact with our environment to obtain what we desire and to avoid what is disadvantageous. The brain plans and executes actions to accomplish this. Actions can be simple (e.g., picking up a pencil), effortful (e.g., endurance running), complex (e.g., dancing), or symbolic (e.g., stick up your thumb to get a ride). In all of these actions our brain is involved, but not to the same degree. Evolution has organized motor functions in a hierarchical system that delegates important motor and control functions to lower levels of the nervous system. This allows the brain to spend more time on other important functions, including the selection of goals and the planning of how to pursue them. Understanding of the neural mechanisms of decision making, action selection, action planning, and action execution has gained a lot from studying neural disorders (Parkinson's disease, orbitofrontal patients, obsessive compulsive disorder, etc.) which are considered in the course. Pre-requisites for this course include a course on biological foundations of behavior and a course on sensation and perception.

Language(s) of Instruction

English

Host Institution Course Number

NEU3001

Host Institution Course Title

NEUROSCIENCE OF ACTION

Host Institution Campus

Host Institution Faculty

Maastricht Science Program

Host Institution Degree

Host Institution Department