# Cognitive Neuroscience

**E-601-HUTA**

<table>
<thead>
<tr>
<th>Year</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester</td>
<td>Fall</td>
</tr>
<tr>
<td>Type of course</td>
<td>Core</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>E-415- HUMT</td>
</tr>
<tr>
<td>Schedule</td>
<td>3 hours per week for 15 weeks; 6 ECTS</td>
</tr>
<tr>
<td>Lecturer</td>
<td>Kamilla Rún Jóhannsdóttir, Brynja Björk Magnúsdóttir og Magnús Jóhannsson</td>
</tr>
</tbody>
</table>

## Content

This course examines biological mechanisms underlying cognition, with a particular focus on the neural substrates of mental processes and their behavioural manifestations; methods in cognitive neuroscience, including EEG, functional neuroimaging; brain-behaviour interactions obtained from studies of human brain damage and the normal brain; the representation of language; hemispheric specialization; and dyslexia, movement disorders and affective disorders.

## Learning outcome - On completing the course, each student should be able to:

- Describe the main biological (and neurological) explanations which lie behind various human actions and behaviour, both as regards everyday actions and behaviour and those which are classified as disorders.
- Be very familiar with methods and ethical problems of cognitive neuroscience.
- Acquire a better understanding of the complex relationship between behaviour, cognition, and brain function.
- Show in project work an ability to use their knowledge in cognitive neuroscience by transferring it over to disease incidents.
- Independently discuss specific disease incidents and analyse the causes behind them, as well as design an appropriate research which might shed further light on the relevant incident.

## Course assessment

Attendance and participation, assignment, case studies. Grades are given on a 0 – 10 point scale. The minimum grade to pass the course is 5.0. The student needs to get a minimum average grade of 5.0 for all course assessment.

## Reading material


## Teaching and learning activities

Lectures, in class exercises and discussions.

## Language of instruction

Icelandic