

**Module description**

<b>Module title</b>	PSYCH-MA-GM-04: Developmental Neuroscience
<b>Subject</b>	Developmental Psychology
<b>Associated degree</b>	Master of Science (M.Sc.)
<b>Module coordinator</b>	Prof. Dr. Gudrun Schwarzer Gudrun.Schwarzer@psychol.uni-giessen.de
<b>Frequency and duration</b>	Winter and summer (2 semester course, 1.5h per week)
<b>Language of instruction</b>	German
<b>Examination</b>	Essay or presentation
<b>ECTS</b>	10 (for full 2 semester module; partial module = 5)
<b>Prerequisites</b>	none
<b>Learning outcomes</b>	<p>Students will</p> <ul style="list-style-type: none"> <li>• learn to think critically about various theories and models of human development</li> <li>• gain detailed knowledge of the research methods used in childhood neuropsychology</li> <li>• learn about childhood syndromes and disorders related to sensorimotor abilities, perception, cognition, and emotion</li> <li>• gain in-depth knowledge of key treatment and support methods for relevant childhood developmental disorders which draw on fundamentals from the discipline</li> </ul>
<b>Module content</b>	<ul style="list-style-type: none"> <li>• Neuropsychological fundamentals of sensorimotor, perceptual, cognitive, and emotional development</li> <li>• Findings in developmental plasticity</li> <li>• Research methods for childhood neuropsychology, electroencephalography (EEG), eye tracking, heart rate analysis, functional MRI (fMRI)</li> <li>• Planning, implementation, and data analysis of neuropsychological studies of different age groups</li> <li>• Age-dependent psychological task analysis</li> <li>• Developmental syndromes and disorders</li> <li>• Relevant methods of diagnosing developmental disorders of sensorimotor abilities, perception, cognition, and emotion</li> <li>• Support measures for sensorimotor abilities, perception, cognition, and emotion which are based on fundamentals from the discipline</li> </ul>