

3.0 credits	37.5 h + 4.0 h	2q
-------------	----------------	----

Teacher(s) :	Roucoux André ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	<ol style="list-style-type: none"> <li>1. Introduction to the main methods and techniques of investigation (recording, lesion, stimulation, imaging, mapping, anatomo-clinical correlation etc)</li> <li>2. Sensory organs and transduction mechanisms</li> <li>3. Central mechanisms for information processing: vision, hearing, taste and olfaction, somesthesia, pain, proprioception, balance</li> <li>4. Motor control (tonus, posture, spinal reflexes, pyramidal and extrapyramidal control, automatic and voluntary movements, locomotion, manipulation, motor coordination etc.)</li> <li>5. Sensory-motor integration</li> <li>6. Vegetative nervous system (ortho- and parasympathetic) and principles of neuroendocrinology</li> <li>7. For some topics, chosen as paradigms (e.g. the visual system), developmental and comparative neurophysiological perspectives are covered.</li> </ol>
Aims :	<ul style="list-style-type: none"> <li>- To study the elementary aspects of the neurophysiological mechanisms of behaviour : coding, information processing and integration, nervous control of posture and movement, vegetative nervous system. The neuro-anatomical principles of these functions are studied.</li> <li>- To identify the main principles of the functional organization of the central and peripheral nervous system (transduction, structure, working, function, parallel processing, hierarchical processing, specialization, control systems etc.)</li> <li>- To examine, through various examples, the laws governing the development of the nervous system.</li> <li>- To provide students with the basic knowledge essential for the understanding of other neuroscience courses they may take at a later stage e.g. psychophysiology, neuropsychology, neurology etc.</li> </ul> <p><i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i></p>
Content :	<ul style="list-style-type: none"> <li>- To study the neurophysiological mechanisms of behaviour : coding, information processing and integration, nervous control of posture and movement, vegetative nervous system. The neuro-anatomical principles of these functions are studied</li> <li>- To identify the main principles of the functional organization of the central and peripheral nervous system (transduction, structure, working, function, parallel processing, hierarchical processing, specialization, control systems etc.)</li> <li>- To examine, through various examples, the laws governing the development of the nervous system</li> <li>- To provide students with the basic knowledge essential for the understanding of other neuroscience courses they may take at a later stage e.g. psychophysiology, neuropsychology, neurology etc.</li> </ul>
Other infos :	<p>In addition to the lectures, students are required to attend two sessions of neuro-anatomy demonstration. (2 x 2 hours)</p> <p>The course is based mainly on material from the course on general and genetic biology (PSP 1131, A. Moens) ; students are therefore required to have taken this course.</p>
Cycle and year of study :	<p> <a href="#">&gt; Bachelor in Psychology and Education: General</a>  <a href="#">&gt; Bachelor in Psychology and Education : Speech and Language Therapy</a>  <a href="#">&gt; Preparatory year for Master in Family and Sexuality Studies</a> </p>
Faculty or entity in charge:	PSP