

## 3203 HUMAN PHYSIOLOGY I

Pharmaceutical Sciences

<b>Course Unit Structure</b>	<b>Year of Study</b> 2nd	<b>Semester</b> 1st	<b>Type</b> General
<b>Student Learning Hours</b>	<b>Lectures</b> 30	<b>Practicals</b> 22.5	<b>Independent work</b> 110
<b>ECTS Credits</b>	6		
<b>Lecturer</b>	Véronique Claire Marie Ferret Nunes Harrington Sena		
<b>Objectives/Competencies</b>	To give students an understanding of the basic concepts of physiology, which will allowing them to get acquainted with the sensory and motor systems		
<b>Contents</b>	Cellular Physiology: Biological compartments. Cell membranes. Resting and action potential. Neurotransmission: the importance of the pre-synaptic and post-synaptic element. General organization of the nervous system. Somatic and Autonomic nervous system Sensory systems: Pain, regulation of temperature, touch, chemical senses, sight, hearing, and balance. Integration of these systems in the regulation of eating and thirst behaviour, and in memory and learning.		
<b>Study Material</b>	Print of the lectures		
<b>Bibliography</b>	<ul style="list-style-type: none"><li>- Textbook of Medical Physiology, A. C. Guyton; J.E. Hall, 2000, 10th ed, Saunders</li><li>- Physiology. The mechanisms of body function. A. Vander, J. Sherman, D. Luciano, 2001, 8th ed, Mc Graw-Hill</li><li>- Anatomia e Fisiologia. Seeley, Stephens, Tate, 1995. Tradução Portuguesa 1997 (Lusodidactica)</li><li>- Introduction to the Human Body. The essentials of Anatomy and Physiology. G.J. Tortora, S.R. Grabowski, 2001, 5th ed, John Wiley &amp; Sons.</li><li>- Physiology of Behaviour. N.R. Carlson, 2001, 7th ed, Ally and Bacon M.</li></ul>		
<b>Prerequisites</b>	None		
<b>Assessment Methods</b>	Practical examination priour to final written examination		
<b>Language of Instruction</b>	Portuguese		
<b>Alternative Assessment Language(s)</b>	French, English		