

COURSE OUTLINE

(1) GENERAL

SCHOOL	SCHOOL OF HEALTH SCIENCES		
ACADEMIC UNIT	SCHOOL OF MEDICINE		
LEVEL OF STUDIES	GRADUATE STUDIES		
COURSE CODE	NEURO 108	SEMESTER	1st
COURSE TITLE	Physiology of the Hypothalamic-Pituitary-Adrenal (HPA) axis		
INDEPENDENT TEACHING ACTIVITIES <i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>		WEEKLY TEACHING HOURS	CREDITS
LECTURES/TESTS		4 HOURS AVERAGE/WEEK (4,5 weeks)	2
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Specialised general knowledge-Elective		
PREREQUISITE COURSES:	NO		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	ENGLISH		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE WEBSITE (URL)			

(2) LEARNING OUTCOMES

<p>Learning outcomes</p> <p><i>The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> • <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i> • <i>Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i> • <i>Guidelines for writing Learning Outcomes</i>
<p>The aim of this course is to understand the physiology of the Hypothalamus-Pituitary-Adrenal axis and how it links the Nervous and Endocrine system to the other systems of the body. In addition, students will realize the importance of this axis for the survival of the organism and will be taught the approaches of studying the normal functioning as well as the malfunctioning of the HPA axis.</p>
<p>General Competences</p> <p><i>Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?</i></p> <p><i>Search for, analysis and synthesis of data and information, with the use of the necessary technology</i> <i>Project planning and management</i> <i>Adapting to new situations</i> <i>Respect for difference and multiculturalism</i> <i>Respect for the natural environment</i></p>

<i>Decision-making</i>	<i>Showing social, professional and ethical responsibility and sensitivity to gender issues</i>
<i>Working independently</i>	<i>Criticism and self-criticism</i>
<i>Team work</i>	<i>Production of free, creative and inductive thinking</i>
<i>Working in an international environment</i>	<i>.....</i>
<i>Working in an interdisciplinary environment</i>	<i>Others...</i>
<i>Production of new research ideas</i>	<i>.....</i>

The course takes aim at the following specific competences:

- Working independently
- Team work
- Criticism
- Production of free, creative and inductive thinking
- Production of new research ideas
- Adapting to new situations

(3) SYLLABUS

1. Anatomy, organization and function of the hypothalamus, pituitary and adrenal glands - Corticotropin releasing hormone (CRH) and related peptides - Role of anti-diuretic hormone (AVP) in HPA Axis)
2. CRH Receptors and their antagonists
3. Biosynthesis, Structure and Action of ACTH; Receptors of ACTH; Opioid Receptors; Biosynthesis, Structure and Action of Adrenal Steroid Hormones
4. Circadian rhythm
5. Effect of the immune system on the HPA Axis
6. Interaction of the HPA Axis with skin
7. Role of neurosteroids in the physiology of the HPA Axis

(4) TEACHING and LEARNING METHODS - EVALUATION

<p style="text-align: center;">DELIVERY</p> <p style="text-align: center;"><i>Face-to-face, Distance learning, etc.</i></p>	Face-to-face	
<p style="text-align: center;">USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</p> <p style="text-align: center;"><i>Use of ICT in teaching, laboratory education, communication with students</i></p>	Learning process support through the e-learn platform	
<p style="text-align: center;">TEACHING METHODS</p> <p><i>The manner and methods of teaching are described in detail.</i></p> <p><i>Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.</i></p> <p><i>The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i></p>	Activity	Semester workload
	Lectures	14
	Independent study for exam preparation	48 (3,5 hours of study required for each hour of lecture)
	Final examinations	2
Course total	50	
<p style="text-align: center;">STUDENT PERFORMANCE EVALUATION</p> <p><i>Description of the evaluation procedure</i></p> <p><i>Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other</i></p> <p><i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i></p>	<p>The evaluation is conducted in English.</p> <p>I. Written final examination (100%) including:</p> <ul style="list-style-type: none"> - Multiple choice questions - Short-answer judgment questions - Short presentation <p>or a combination thereof</p> <p>Criteria and assessment method are announced during the course and posted on e-learn</p>	

(5) ATTACHED BIBLIOGRAPHY

-Research papers, chapters and reviews that will be given to the students during the lectures