

Anno Accademico 2019/2020

ADVANCED SYSTEMIC NEUROPHISILOGY	
Enrollment year	2018/2019
Academic year	2019/2020
Regulations	DM270
Academic discipline	BIO/09 (PHYSIOLOGY)
Department	DEPARTMENT OF BIOLOGY AND BIOTECHNOLOGY "LAZZARO SPALLANZANI"
Course	NEUROBIOLOGY
Curriculum	PERCORSO COMUNE
Year of study	2°
Period	1st semester (01/10/2019 - 14/01/2020)
ECTS	9
Lesson hours	72 lesson hours
Language	Italian
Activity type	ORAL TEST
Teacher	D'ANGELO EGIDIO UGO (titolare) - 6 ECTS BOTTA LAURA - 3 ECTS
Prerequisites	The students of this course are required to have knowledge of the physiology provided during the course of the Three Year Degree in Biological Area.
Learning outcomes	The course aims to provide students with the basic knowledge about the large scale organization of nerve functions and the neural mechanisms that generate them.
Course contents	First part (3 cfu): Anatomic Functional Organization of the Nervous System; Neuro-modulated diffuse systems: noradrenergic, dopaminergic, serotoninergic and cholinergic systems; Neurotransmitters and synaptic receptors;motor control. Neurotransmitters, drugs and addiction;

Perception and pain; Neurovegetative functions: Orthosympathetic, Parasympathetic and Enteric Nervous System; The autonomic nervous system and the hypothalamus: hunger control, fluid intake, and thermoregulation. Second part (6cfu): neural models and microcircuits, higher functions of the central nervous system **Teaching methods** The course is organized in frontal lectures by presenting slides in Power Point. Reccomended or required D'Angelo-Peres FISIOLOGIA – Edi-ermes readings The test of learning is in writing, with 3 questions of a specific nature **Assessment methods** aimed to verify the study and the knowledge of the subject. **Further information** Sustainable development \$lbl_legenda_sviluppo_sostenibile goals - Agenda 2030