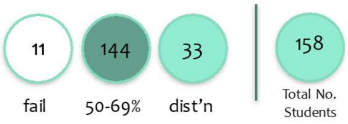
PG-7901: Form & Function of Nervous System (FNF)

Lecture Based Module

Term: ***Michaelmas***
Credit weighting: 5 ECTS
Co-ordinator: Dr. E. Jimenez
Assessment: MCQ+SAQ Exam (100%)

Previous Module Mark Statistics



This module will deal with the structure and function of the nervous system. Lectures will focus on gross anatomy and functions of the central and peripheral nervous systems; ventricles and CSF; vasculature of the brain; ion channels; synaptic transmission; sensory, motor and limbic systems; plasticity, memory and learning.

Details of the module

Introduction	Dr. E. Jimenez	Hartigan	Wk 3	Mon 12 Sep	11-12h
Neurophysiology I	Dr. E. Jimenez	Hartigan	Wk 3	Mon 12 Sep	12-13h
Neurophysiology II	Dr. E. Jimenez	B2.72	Wk 3	Tue 13 Sep	11-12h
Synaptic Transmission	Dr. E. Jimenez	B2.72	Wk 3	Tue 13 Sep	12-13h
Synaptic Plasticity	Dr. E. Jimenez	B2.74	Wk 3	Wed 14 Sep	11-12h
Cerebrospinal fluid and Blood	Dr. E. Jimenez	B2.74	Wk 3	Wed 14 Sep	12-13h
CNS	Dr. E. Jimenez	LB11	Wk 3	Thu 15 Sep	11-12h
PNS	Dr. E. Jimenez	LB11	Wk 3	Thu 15 Sep	12-13h
ANS	Dr. E. Jimenez	Hartigan	Wk 3	Fri 16 Sep	11-12h
Somatosensory System	Dr. E. Jimenez	Hartigan	Wk 3	Fri 16 Sep	12-13h
Motor System I	Dr. E. Jimenez	B2.72	Wk 4	Tue 20 Sep	11-12h
Motor System II - Cerebellum	Dr. E. Jimenez	B2.72	Wk 4	Tue 20 Sep	12-13h
Motor System III - Basal Ganglia	Dr. E. Jimenez	B2.74	Wk 4	Wed 21 Sep	11-12h
Thalamus	Dr. E. Jimenez	B2.74	Wk 4	Wed 21 Sep	12-13h
Hypothalamus	Dr. E. Jimenez	Hartigan	Wk 4	Fri 23 Sep	11-12h
Olfaction	Dr. E. Jimenez	Hartigan	Wk 4	Fri 23 Sep	12-13h
Hearing & Equilibrium	Dr. E. Jimenez	Hartigan	Wk 5	Mon 26 Sep	11-12h
Gustation	Dr. E. Jimenez	Hartigan	Wk 5	Mon 26 Sep	12-13h
The Visual System I	Dr. E. Jimenez	B2.72	Wk 5	Tue 27 Sep	11-12h
The Visual System II	Dr. E. Jimenez	B2.72	Wk 5	Tue 27 Sep	12-13h
TOTAL HOURS					**20 h**

Reading/Learning Resources

- Neuroscience (5th edition) by D. Purves et al. (2012)
- Neuroscience: Exploring the brain (3rd edition) by M.F. Bear, B. Connors, M. Paradiso (2006)
- Principles of Neural Science, Fifth Edition (Principles of Neural Science (Kandel)) 5th Edition by Eric R. Kandel (Editor), James H. Schwartz (Editor), Thomas M. Jessell (Editor), Steven A. Siegel-baum (Editor), A. J. Hudspeth (Editor)

Learning Outcomes

On successful completion of this module students should be able to:

- Name the main structures of the nervous system and to explain their developmental origin
- Explain the basic concepts of excitability and neurotransmission
- Explain the basis of the most common neurological disorders
- Detail the main functional subsystems of the central nervous system
- Discuss the main concepts of homeostasis and learning theories.

Assessment (100%): Exam Friday 21 October 2022 11:00-13:00hr

In person MCQ+SAQ Exam (EEPC1/EEPC2)