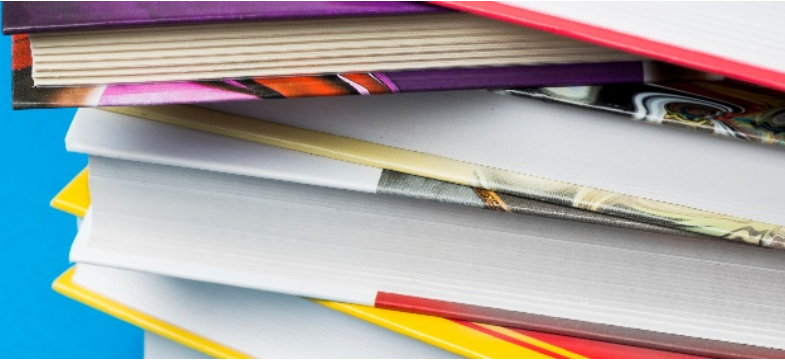
TEL AVIV UNIVERSITY אוניברסיטת תל אביב

Full Syllabus



Course Title

Molecular basis and histopathology of central nervous system diseases and its animal models

Lecturer

Prof. Jens Pahnke

Semester

Second

Course requirements

Introduction to Neurobiology

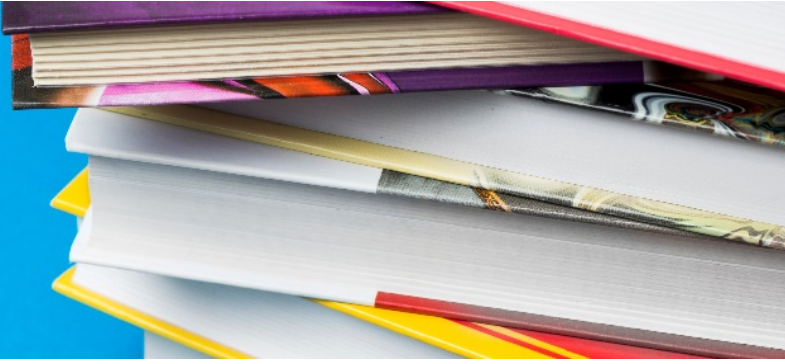
Final grade components

Exam

Course schedule

Class no. / Date	Subject and Requirements (assignments, reading materials, tasks, etc.)
1	Introduction – tissue reaction, injury patterns, staining methods, analytic methods, mouse models of brain diseases
2	Oedema, herniation, hydrocephalus
3	Brain trauma – parenchymal, vascular, haematomas
4	Cerebrovascular disease – hypoxia, ischemia, haemorrhage
5	Congenital malformations / brain development
6	Infections of the nervous system
7	Brain tumours – benign and malignant tumours in kids and adults
8	Molecular methods in brain tumour diagnostics
9	Diseases involving the skeletal muscle
10	Inflammatory / demyelinating diseases
11	Neurodegenerative diseases

Full Syllabus



12	1. Image processing and the use of machine learning for the analysis of brain tissue

Required course reading

Optional course reading

Comments