IEPR1004 Cell biology and fundamentals in histology

[45h] 5 credits

Teacher(s): Patrick Henriet, Philippe van den Bosch Sanchez de Aguilar
Language: French
Level: First cycle

Aims

By the end of the module, students should understand the bases of unicity and diversity in the living world. They will know the structure and functioning of human cell and genome as well as the mechanisms of cell division and embryonic development. Moreover, they will know the structure of the major types of human tissues.

Main themes

The major themes are :
- Characteristics common to all living species
- The human cell, its functioning and division
- Classical, evolutive and molecular genetics
- Cellular bases in sexual reproduction
- The differents cell types and their organisation in tissues
- The major steps in human embryonic development

Content and teaching methods

(auteurs - titulaires actuels) : P. Henriet and Ph. van den Bosch de Aguilar
1. UNICITY IN THE LIVING WORLD
2. THE HUMAN CELL
3. DIVERSITY IN THE LIVING WORLD
4. MOLECULAR GENETICS
5. CELL DIVISION
6. GAMETOGENESIS AND FERTILIZATION
7. INTRODUCTION TO HUMAN EMBRYOLOGY
8. THE HISTORY OF LIFE
Histology
1. EPITHELIAL TISSUE
2. CONNECTIVE TISSUE
3. BLOOD TISSUE
4. MUSCLE TISSUE
5. NERVE TISSUE

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Pré-requis Appui sur "chimie générale et biomolécules"
Evaluation Examen écrit ou oral et/ou éléments d'évaluation continue
Support Syllabus et/ou livre(s)
Encadrement Titulaire(s)
Autres

Other credits in programs

EDPH11BA	Première année de bachelier en sciences de la motricité	(5 credits)	Mandatory
FSA12BA	Deuxième année de bachelier en sciences de l'ingénieur, orientation ingénieur civil	(5 credits)	
FSA13BA	Troisième année de bachelier en sciences de l'ingénieur, orientation ingénieur civil	(5 credits)	
KINE11BA	Première année de bachelier en kinésithérapie et réadaptation	(5 credits)	Mandatory