UCLouvain

lecri1502

2017

Introduction to biomedical Sciences in relation with Criminology

4 credits	30.0 h	Q2

Teacher(s)	Bonbled Frédéric ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	Progressive study of the molecular and cellular levels at the systemic level, of normal with the pathological one. Acquisition of the bases of the reasoning and the scientific method in biomedical sciences. The course will study the following matters (their access being in particular directed on a preparation and an initiation with medico-legal and criminalistic knowledge): - cellular biology; - development in growth; molecular genetics, heredity and analysis ADN; - elements of immunology, neurobiology and hematology; - fibres and hairs; - bases of toxicology; - elements of respiratory physiology; - cardiovascular, of the nutrition and the reproduction; - psychotropic drugs, drugs, dependences and behaviors; - elements of physiopathology and anatomopathology of behavioral anomalies and causes of death; - elements of medico-legal anthropology; - biological and legal identity. - Biological theories of criminality.
Aims	1 Initiation being studied biomedical sciences and criticizes biological theories in relation to criminology. Synthetic presentation of the essential assets of sciences in biology, physiology and anatomy, by developing the fields more particularly criminological (and criminalistic). - - - - *The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Evaluation methods	Written exam (QCM)
Teaching methods	Exposed ex-cathedra structuring a study of documentary elements referred, personal and by groups, gradually set up on i-campus, and articulated on an iconography presented in "powerpoint", returning systematically to the concrete situations presented in introduction of the course.
Content	After recalls of cellular biology, the talks will radiate starting from the study of a fictive "scene of crime " . The biological and different indices collected (traces of bleedings, hair, prints, projectiles...) will be exploited thoroughly by systematically revisiting the means arising of biomedical sciences and the contributive elements - of human anatomy, histology, pathology and physiology (blood circulation and cardiac function, hematology - blood and its components - bleeding and haemostase, respiratory function), - of medical biology (bloods' analysis) - of toxicology (search for poisons on blood and other sampling; study of their distribution ans sites, clinical effects, clinical effects of the acute or chronic intoxication, dependence) by visiting the anatomy and digestive physiology, the hepatic and renal function (metabolisation, elimination), - of personal identification (biology of the reproduction, heredity, molecular genetics, applications of the genetic print and analysis of the ADN) by extending the study to questions of anthropology, of dermatology versus fingerprint, hair and hairs), - of immunology and microbiology (serology, preexistent infection (virus) and sedondary with the lesion and inflammation) The elements of growth and development, of functional anatomy of the central nervous system (neurobiology, including the hormonal system), the sense organs, the great principles of the biological theories of criminality will be also approached. Finally some non-biological indices (ballistics...) will be studied in a distinct way and will be reported to the biological observations.
Bibliography	Bibliographie sur Moodle

Faculty or entity in charge	ECRI

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Minor in Criminology	LCRIM100I	4		