UCLouvain

wfarm1303

2022

Clinical Chemistry

2.00 credits	20.0 h	Q2

Teacher(s)	Dewulf Joseph ;Fillee Catherine ;Gruson Damien ;Haufroid Vincent (coordinator) ;van Dievoet Marie-Astrid ;
Language :	French
Place of the course	Bruxelles Woluwe
Prerequisites	*The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.*
Main themes	Introduction to biological matrices, preanalytical requirements, stability, analytical performances Serum proteins Kidney function Pancreatic function (exo and endo) Liver function Anemia Cardiovascular risks Thyroid
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 Provide the student, at the end of the 1st cycle (BAC13), the abilities to interpret clinical chemistry laboratory tests (diagnostic, follow up, prevention,). Together with other lectures in the field of human pathologies (microbiology, pathology,) this lecture should meet the recommendation from CEE regarding pharmaceutical missions: reinforce the role of the pharmacist as health councillor.
Evaluation methods	The **evaluation** is done through a written final exam, in French, in the form of multiple choice questions and short answer open-ended questions. The final note is the weighted average of the notes of the five teachers (weighted according to the number of hours delivered by each teacher). In the final note, the general part and renal function is worth 4/20, the clinical enzymology, inflammation markers, hepatobiliary function and endocrine pancreatic function are worth 6/20, the exocrine pancreatic function is worth 2/20, the cardiac function and thyroid function are worth 4/20 and the haematopoiesis and anaemias are worth 4/20. Identical modalities in the first and second examination sessions.
Teaching methods	Teaching is given in auditorium, in comodal or distantial (depending on the health situation) via lectures (total of 20 hours). It relies on the development of theoretical concepts, but also on the description of practical examples. The course involves several active teachers who are experts in their field.
Content	The main biological functions will be addressed with a brief physiopathological introduction followed by the main **laboratory analyses** that may lead to their investigation. The course will begin with an introduction to biological media, pre-analytical requirements and the notions of specificity and sensitivity of laboratory tests (biomarkers). The main biological functions will then be discussed in separate chapters: renal function (glomerular and tubular insufficiency, glomerular filtration rate), hepatobiliary function (cytolysis, cholestasis, including elements of clinical enzymology), main markers of inflammation, pancreatic function both exocrine and endocrine (diabetes), cardiac function (myocardial infarction, heart failure), thyroid function (hypothyroidism, hyperthyroidism), haematopoiesis and central and peripheral anaemias (deficiencies, deficits in production or excess in destruction).
Other infos	Support: Course slides available on Moodle. Varia: The Clinical Biology Department of St Luc University Clinics offers students the opportunity each year to perform probationary periods (1 or 2 months) in one of its clinical laboratories.
Faculty or entity in charge	FARM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Biomedicine	SBIM2M	2		🔍
Master [120] in Biochemistry and Molecular and Cell Biology	BBMC2M	2		🔍
Master [60] in Biomedicine	SBIM2M1	2		🔍
Bachelor in Pharmacy	FARM1BA	2	WFARM1221 AND WFARM1213	🔍