UCLouvain

wdent1255

2019

In view of the health context linked to the spread of the coronavirus, the methods of organisation and evaluation of the learning units could be adapted in different situations; these possible new methods have been - or will be - communicated by the teachers to the students.

3 credits	30.0 h	Q1

Teacher(s)	Bommer Guido ;Collet Jean-François ;Lemaigre Frédéric (coordinator) ;Rider Mark ;
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.*
Aims	*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	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** The written examination will consist in part of a multiple-choice questions and in part open-ended questions. Students will be evaluated on their ability to synthesize and integrate several biochemistry data into a coherent synthesis. They must be able to describe, use and explain in precise biochemical terms the topics addressed and how a disease can result from molecular and biochemical dysfunctions. There are no negative points or weighting according to the questions and chapters of the subject. However, when a student has a final mark between 9/20 and 10/20 after correction, the lecturers review together the exam copy to decide whether the mark should be rounded down or up. It is therefore a complete re-evaluation of the copy that the 4 lecturers carry out. If the conclusion is that the answers are insufficient, the score will be rounded down.
Teaching methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** Lectures
Content	The course presents the basic principles of biochemistry as well as a series of human biochemistry themes considered as relevant to the training of students in Dentistry. The chapters on human biochemistry include a description of normal biochemical mechanisms, as well as illustrations of disorders that cause human pathologies. More specifically, the following topics will be addressed: Reminder of the principles of thermodynamics Structure and function of hemoglobin Introduction to enzymes Principles of enzyme kinetics Principles of metabolic control The glycolytic pathway and glycogen metabolism The tricarboxylate cycle (Krebs cycle) Amino acid metabolism Fatty acid metabolism Bile biochemistry (bilirubin, bile salts) Mechanisms of gene expression and diseases related to gene dysfunctions
Inline resources	The slides presented in the course, which cover the subject in a comprehensive way, are available on MoodleUCL (https://moodleucl.uclouvain.be/). In addition, a tablet will be used to explain certain aspects of the course. The "Tablet" versions of the PowerPoint files will also be made available to students via MoodleUCL.
Bibliography	PC Champe & RA Harvey: Biochemistry. Lippincott Williams & Wilkins Voet et Voet "Biochimie" 2e édition 2007, traduction de la 3e édition américaine par Guy Rousseau et Lionel Domenjoud Textbook of Biochemistry with Clinical Correlations, 7ème édition, Thomas M. Devlin
Faculty or entity in charge	MDEN

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Bachelor in Dentistry	DENT1BA	3	WMEDE1101 AND WMDS1109 AND WMDS1105 AND WMEDE1112	