

4.00 credits

30.0 h + 15.0 h

Q2

Teacher(s)	Page Melissa ;
Language :	English
Place of the course	Louvain-la-Neuve
Prerequisites	<p>It is recommended to have acquired the knowledge and skills developed in the teaching units:</p> <p>LCHM1111 Chimie générale LCHM1141 Chimie organique LCHM1271 Eléments de biochimie</p> <p><i>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.</i></p>
Main themes	<p>Main themes to cover :</p> <ol style="list-style-type: none"> 1. Introduction to metabolism 2. Bioenergetics 3. Biochemical transport phenomenon <p>Main metabolic ways :</p> <ol style="list-style-type: none"> 1. Glycolysis and hexose catabolism 2. Metabolism of glycogen and glyconeogenesis 3. Oxidation of fatty acids and biosynthesis of lipids 4. Krebs cycle 5. Electron transport, oxidative phosphorylation 6. Metabolism of amino acids, nucleotides and linked molecules. <p>Main ways of regulation.</p> <p>The exercises are divided into two complementary parts :</p> <p>One, followed in the case of CHIM BAC, consists of practical work on a specific question in biochemistry.</p> <p>The other, for all, consists of preparing, presenting and discussing, in groups, a question linked to a biochemical problem, but voluntarily carrying onto other disciplines of life sciences.</p>
Learning outcomes	
Evaluation methods	<p>For all students (chemists, biologists and veterinarians), evaluation includes :</p> <ol style="list-style-type: none"> 1. A written exam that will take place during the June exam session. The exam can include questions requiring precise / short answers, theoretical developments or problem solving. Exam questions are presented in both French and English. Answers in either language are equally accepted and there is no preference for one language over the other. 2. Group work, which can include a group presentation. The evaluation for the group will take place during the normal class hours. Group work can be prepared in French or English. <p>For chemistry and biology students evaluation includes :</p> <ol style="list-style-type: none"> 3. A lab report following the participation and completion of laboratory sessions. The evaluation will take place during the normal term. The lab report can also be prepared in French or English.
Teaching methods	<p>The skills targeted by the course will be developed using lectures.</p> <p>Laboratory sessions are for chemistry and biology students, and not for students in veterinary science.</p> <p>Group projects are mandatory for all.</p>
Content	Please look to LCHM1371 for all the information concerning this course.
Inline resources	Slideshows are available via the moodle platform based on current literature and the two textbooks listed (these are not required by the students)
Bibliography	<ul style="list-style-type: none"> • Lehninger Principles of biochemistry 7th edition • Voet & Voet Biochemistry 4th Edition <p>Le cours ne fait appel à aucun support particulier qui serait payant et jugé obligatoire. Les manuels ci-dessus sont recommandés (mais pas obligatoires) sur une base facultative pour un apprentissage plus approfondi</p>

Faculty or entity in charge	CHIM
-----------------------------	------

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Veterinary Medicine	VETE1BA	4	LBIO1111 AND LCHM1141A	