

Module name	<b>Biochemistry of nutrition</b>
Module code	B-BM.072Eng
ISCED code	0511: Biology
Study cycle	I <sup>o</sup>
Semester	winter
Responsible for this module	dr Justyna Sulej Department of Biochemistry and Biotechnology email: justyna.sulej@poczta.umcs.lublin.pl
Language of instruction	English
Website	
Prerequisites	passed biochemistry course
ECTS	1
ECTS points hour equivalents	Contact hours (work with an academic teacher) – 15 - lectures: 15  Non-contact hours (students' own work) – 15 - preparation for the credit: 10 - literature study: 5  <b>Total number of ECTS points for the module - 1</b>
Learning outcomes verification methods	lecture - final written test
Course full description	This module will highlight the role of nutrients and nutrient metabolism in human health. The course covers the structural and functional characteristics of macronutrients (amino acids, proteins, carbohydrates, lipids) and micronutrients (vitamins) in food consumed by humans. Biochemical mechanisms associated with the digestion and assimilation of macronutrients. Molecular aspects of nutrition and integration of metabolic pathways of food ingredients. Bases of human nutrition in relation to the organs and systems of the body and physiological conditions (e.g. pregnancy, lactation, growth, puberty, aging).
Bibliography	<ol style="list-style-type: none"> <li>1. Voet D.J., Voet J.G., Pratt C.W., Principles of Biochemistry, 5th global ed., John Wiley &amp; Sons, Inc., 2018;</li> <li>2. Mann J., and Truswell A.S. Essentials of human nutrition. Oxford University Press 2007;</li> <li>3. Appleton, A., and Vanbergen O. Crash Course: Metabolism and Nutrition. Elsevier Health Sciences, 2012.</li> <li>4. Materials compiled by the teacher and provided to students before classes.</li> </ol>
Learning outcomes	<p>Based on the Resolution of the Senate of the Maria Curie-Skłodowska University No. XXIV-27.18/19 of 29 May 2019. (i.e. from the 2019/2020 education cycle):</p> <p><b>KNOWLEDGE</b> <b>The graduate</b> W1: Defines and describes the biologically active molecules contained in food; based on the knowledge of organic chemistry and biochemistry and metabolism of these compounds at the cellular level.  W2: Characterizes and explains biochemical processes occurring during food intake, digestion and metabolism in living organisms.</p> <p><b>SKILLS</b></p>

	<p><b>The graduate</b>  U1: Can critically assess facts related to a person's diet  U2: Know how to evaluate the influence of various factors on the processes related to the metabolism of nutrients</p> <p><b>SOCIAL COMPETENCES</b>  <b>The graduate</b>  K1: Shows an active attitude in gaining, supplementing and updating the knowledge on nutrition biochemistry</p>
Practice	-
Teaching methods	multimedia presentation, scientific discussions.