

1.	<b>Field of study</b>	<b>Chemistry</b>
2.	Faculty	Faculty of Science and Technology
3.	Academic year of entry	2023/2024 (summer term)
4.	Level of qualifications/degree	second-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time

<b>7. General information about the module</b>	
<b>Module name</b>	<b>Chemistry of Nutrition and Nutrients</b>
Module code	W4-CH3-S2-2-CNN
Number of the ECTS credits	5
Language of instruction	English
Purpose and description of the content of education	<p>The main goal of the course is to provide basic knowledge on the nutrition processes and nutrients. The course begins with the basic information on chemical structure and biochemical functions of the main groups of macronutrients: carbohydrates, proteins and fats. The second part of the course focuses on the chemistry and biochemistry of micronutrients, such as vitamins, and minerals. Significance of a balanced diet is the topic of the final part of the course.</p> <p>Improper nutrition whether it is overnutrition or undernutrition and its adverse health effects are presented and discussed briefly. The close link between a properly balanced diet and sustainable agriculture is underlined.</p> <p>Two first parts of the course constitute about 75% of the presented material. Grading is based on the final, in-class exam. Students are expected to participate actively in this course. During workshops, they discuss some aspects of the course either mentioned briefly in the lecture or not mentioned at all. The list of these additional topics (like food additives, unbalanced diet and the risk of high level of cholesterol) to be discussed will be given in advance. The educational materials such as research papers, web pages, videos, and official documents will be provided by the lecturer. Students are to prepare and present in class one short paper as an introduction to the in-class discussion. Good quality of the presentation and active participation count as a bonus toward the final grade.</p>
List of modules that must be completed before starting this module (if necessary)	not applicable

<b>8. Learning outcomes of the module</b>			
Code	Description	Learning outcomes of the programme	Level of competenc (scale 1-5)
W4-CH3-S2-2-CNN_1	Student knows basic facts about nutrition and nutrients	CH_W01 CH_W04	3 3
W4-CH3-S2-2-CNN_2	Student is aware of the link between nutrition, health effects, and sustainable food production and agriculture	CH_W01 CH_W04	3 3
W4-CH3-S2-2-CNN_3	Student can use his/her knowledge to prepare a balanced diet.	CH_U04 CH_U06	4 4

9. Methods of conducting classes		
Code	Category	Name (description)
a01	Lecture methods / expository methods	Formal lecture/ course-related lecture <i>a systematic course of study involving a synthetic presentation of an academic discipline; its implementation assumes a passive reception of the information provided</i>
a02	Lecture methods / expository methods	Monographic lecture <i>an exhaustive discussion of one issue, usually related to the research interests of the person teaching the course or a thorough presentation of one selected issue</i>
a05	Lecture methods / expository methods	Explanation/clarification <i>explication involving the derivation of a predetermined theorem from other, already known ones, in the number of steps specified by the person teaching the course</i>
b02	Problem-solving methods	Lecture-discussion <i>transmission of content involving interaction with the lecture audience; discussion of lecture-related issues is one of its elements or constitutes its follow-up</i>
c02	Demonstration methods	Video show <i>reproducing a film or video material in its entirety or in fragments in order to illustrate the content taught in class, to submit it to analysis and evaluation or to use it as an exercise in image perception; a film/video can be a work of art, an illustration (also technical illustration) of a content/phenomenon/object, a private record of an action, a media image, etc.</i>
c03	Demonstration methods	Audio playback / audio drama <i>preparation and reproduction of sound material (audio recording) in its entirety or in fragments in order to illustrate the content taught in class, to submit it to analysis and evaluation or to use it as a method of sound perception, including the appreciation of a musical piece, an artistic audio drama, an oral presentation of an artistic or scientific text as well as a media text; analysis of the sound material recorded on a carrier with a view to studying a sound-related phenomenon</i>

10. Forms of teaching					
Code	Name	Number of hours	Assessment of the learning outcomes of the module	Learning outcomes of the module	Methods of conducting classes
W4-CH3-S2-2-CNN_fs_1	lecture	15	exam	W4-CH3-S2-2-CNN_1, W4-CH3-S2-2-CNN_2, W4-CH3-S2-2-CNN_3	a01, b02
W4-CH3-S2-2-CNN_fs_2	workshop	45	course work	W4-CH3-S2-2-CNN_2, W4-CH3-S2-2-CNN_3	a02, a05, c02, c03

11. The student's work, apart from participation in classes, includes in particular:			
Code	Category	Name (description)	Is it part of the BUNA?
a02	Preparation for classes	Literature reading / analysis of source materials <i>reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class</i>	No
c02	Preparation for verification of learning outcomes	Studying the literature used in and the materials produced in class <i>exploring the studied content, inquiring, considering, assimilating, interpreting it, or organizing knowledge obtained from the literature, documentation, instructions, scenarios, etc., used in class as well as from the notes or other materials/artifacts made in class</i>	No
c03	Preparation for verification of learning outcomes	Implementation of an individual or group assignment necessary for course/phase/	Yes

		examination completion <i>a set of activities aimed at performing an assigned task, to be executed out of class, as an obligatory phase/element of the verification of the learning outcomes assigned to the course</i>	
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Information on the details of the module implementation in a given academic year can be found in the syllabus available in the USOS system: <https://usosweb.us.edu.pl>.