SYLLABUS

The academic year when the cycle of instruction is commenced 2019-2025 INT

Module/course name:	**Hygiene and Nutrition**	**Module code**	
Faculty:	Faculty of Medicine MUL		
Major:	Medical		
Specialty:			
Level of study:	I (Bachelor studies) ☐ II (Master studies) ☐ Integrated Master studies **X** Doctoral studies ☐		
Mode of study:	full-time **X**		
Year of study:	I **X** II ☐ III ☐ IV ☐ V☐ VI ☐	Semester:	1☐ 2 **X** 3☐ 4 ☐ 5☐ 6☐ 7 ☐ 8 ☐ 9☐ 10 ☐ 11 ☐ 12 ☐
Module/course type:	obligatory ☐ elective **X**		
Language of instruction:	Polish ☐ English **X**		

Form of education	**Hours**
Lecture	
Seminar	**30**
Laboratory class	
E-learning	
Practical class	
Internship	
Other	
TOTAL	
Student's work input (participation in class, preparation, evaluation, etc.)	**Student's hourly workload**
1. In class	**30**
2. Student's own work including: 1 Peparation for class 2 Preparation for partials and finals	**10**
Summary of the student's workload	**40**
ECTS points for module/course	**1**

Educational objectives: Educational objectives: The course it to provide students information about nutrients (carbohydrates, proteins, fats, vitamin and minerals) and their roles in human body at different stages of human life. Foodborne and waterborne diseases will be discussed focusing or routes of their transmission and the significance of food and water hygiene. The benefits and risks connected with use of genetically modified organisms will be discussed. Xenobiotic (drug, pesticide, detergent, heavy metal) poisoning will be shown. Presentation of case reports. Cancerogens in food will be enumerated and discussed. Enteral and parenteral nutrition in different diseases will be explained. Clinical trials showing effectiveness of special diets in particular diseases will be presented (DASH diet in hypertensive patients, low purine diet in gout, diet in diabetes, gastritis, kidney stones, nutrition in genetic diseases: phenylketonuria, galactosemia, nutrition in food allergies).

The matrix of learning outcomes for module/ subject with reference to verification methods of the intended educational outcomes and forms of instruction:

Learning outcome code	A student who has obtained a credit for the module/course has the knowledge/skill to:	Methods of verifying the achievement of the intended learning outcomes:	Form of instruction * provide the symbol
BW11	describes the structure of lipids and polysaccharides and their function in cellular and extracellular structures	Oral exam SEMESTER CONDUCTED IN THE FORM OF THE COMPETITION, NECESSARY ACTIVE PARTICIPATION IN OXFORD YPE DISCUSSIONS AND EXERCISES	seminar
BW15	describes basic katabolic and anabolic pathways, methods of their control and the effect of genetic and environmental factors;		
BU1	applies knowledge of the laws of physics to explain the effect of external factors, such as temperature, gravity, pressure, electromagnetic field and ionizing radiation on human body and its elements;		
BU2	can assess damaging effect of ionizing radiation dose and observes principles of radiological protection		
CW10	assesses benefits and risks resulting from presence in the ecosystem of genetically modified organisms(GMO);		
CW20	knows the basics of disinfection, sterilization and aseptic procedures;		
CW33	can name internal and external, modifiable and non-modifiable pathogenic factors;		
CW37	can describe the effect of disease processes on metabolism and elimination of drugs		
CW43	knows the basic issues of general toxicology		
CW44	knows groups of medicinal drugs which, when overused, may lead to poisoning;		
CW45	knows the symptoms of most common types of poisoning, including those caused by alcohol, drugs, psychoactive substances, heavy metals and some groups of medicinal drugs;		
CW48	knows the consequences of vitamins or minerals deficiency and excess		
CW50	knows the consequences of wrong nutrition, including long starvation, taking too big meals and having unbalanced diet;		
EW1	knows the genetic, environmental and epidemiological background of most common diseases;		
EW7	knows and understands the causes, symptoms, diagnostic principles and therapeutic procedures in respect to most common internal diseases in adults and their complications;		

EU15	identifies conditions after alcohol, drug and other stimulant abuse;		

EXAMPLES OF METHODS VERIFYING THE ACHIEVEMENT OF THE INTENDED LEARNING OUTCOMES:

In terms of knowledge: Oral exam

In terms of skillsproject, presentation.

In terms of social competences:

A reflective essay; an extended observation by a supervisor/tutor; 360-degree assessment (feedback from teachers, peers, patients, other co-workers);

Course content: (use keywords referring to the content of each class following the intended learning outcomes):

Laboratory class:

1. Nutrients –carbohydrates and their roles in human body.
2. Nutrients- proteins and their roles in human body.
3. Nutrients – fats and their roles in human body.
4. Nutrients - vitamin and minerals and their roles in human body. he consequences of vitamins or minerals deficiency and excess
5. Foodborne and waterborne diseases. Routes of their transmission and the significance of food and water hygiene. Hand hygiene. Disinfection
6. The benefits and risks connected with use of genetically modified organisms.
7. Xenobiotics (drug, pesticide, detergent, heavy metal) poisoning .
8. Case reports. Causes, symptoms, diagnostic principles and

therapeutic procedures in respect to most common internal diseases in adults and their complications; Diet as modifiable pathogenic factor;

9 Carcinogenesis. Carcinogens (physical, chemical, biological)Carcinogens in foods.

10 Consequences of wrong nutrition, including long starvation, taking too big meals and having unbalanced diet; Enteral and parenteral nutrition in different diseases

11.linical trials showing effectiveness of special diets in particular diseases will be presented (DASH diet in hypertensive patients).

12.Low purine diet in gout.

13.Diet in diabetes.

14.Diet in gastritis, kidney stones.

15.Nutrition in genetic diseases: phenylketonuria, galactosemia, nutrition in food allergies.

Obligatory literature:

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1. 1.Roberta Larson Duyff: Complete food and nutrition guide. 2 nd ed. John Wiley & Sons, Inc, Hoboken, New Jersey, 2002.

2.Sue Rodwell Williams: Essential of nutrition and diet therapy, 6th ed. Mosby, St Louis, Missouri, 1994

3.Klaassen C.D. Watkins III J.B. Casrett & Doull's Essentials of Toxicology , McGraw Hill, 2010

Requirements for didactic aids (e.g. laboratory, multimedia projector, others…)

1. Multimedia projector, laptop, chemistry and physics laboratory, weighing scale

Conditions for obtaining a credit for the subject: Attendance is required. Student must participate in lab sessions according to the schedule. During the semester only 1 absence is possible. All excused absences from class must be reported. Participation performance will not be penalized for excused absences. In the case of absences with the content of classes the student missed shall be made up according to the schedule given by the instructor. Students are expected to arrive at class on time. Students that arrive after class begins will not be permitted in the classroom until the break. 3 tardiness will be considered 1 complete absence.

2.The overall course grade will be determined by the result of the final comprehensive oral exam, which verify if the student acquired the knowledge, of the information as stated in the syllabus. A passing score confirms the satisfactory

fulfilment of course requirements and is based on student's class attendance and grade.

The name and address of the department/clinic where the course is taught (module/course); contact details (phone number/ email address):

Chair and Department of Hygiene
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Head: professor Andrzej Borzęcki, MD, PhD

Names of the author/authors of this syllabus:

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Names of the teacher/teachers conducting classes:
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Signature of the head of the department/clinic

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Dean's signature

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Date of submission:

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