SYLLABUS

REGARDING THE QUALIFICATION CYCLE FROM 2022/2023 TO 2022/2023

1. BASIC COURSE/MODULE INFORMATION

Course/Module title	Food hygiene
Course/Module code *	
Faculty (name of the unit offering the field of study)	College of Natural Sciences Institute of Food and Nutrition Technology
Name of the unit running the course	Department of Bioenergetics, Food Analysis and Microbiology
Field of study	Food technology and human nutrition
Qualification level	
Profile	General academic
Study mode	Part-time
Year and semester of studies	Winter semester
Course type	Erasmus + program
Language of instruction	English
Coordinator	Maciej Kluz PhD
Course instructor	Maciej Kluz PhD

* - as agreed at the faculty

1.1.Learning format – number of hours and ECTS credits

Semester (no.)	Lectures	Classes	Colloquia	Lab classes	Seminars	Practical classes	Internships	others	**ECTS credits**
Winter	15			15					5

1.2. Course delivery methods

- conducted in a traditional way

1.3. Course/Module assessment (exam, pass with a grade, pass without a grade)

EXAM

2. PREREQUISITES

Completed course: general and inorganic chemistry, organic chemistry, food microbiology, biochemistry

3. Objectives, Learning Outcomes, Course Content, and Instructional Methods

3.1. Course/Module objectives

O1	Discuss the characteristics and role of microorganisms in food hygienie.
O2	Discuss the food safety and hygiene.

3.2. Course/Module Learning Outcomes (to be completed by the coordinator)

Learning Outcome	The description of the learning outcome defined for the course/module	Relation to the degree programme outcomes
LO_01	Has knowledge of the mechanisms of biochemical processes in food during storage.	K_W02
LO_02	Has knowledge of the principles of safety production of food.	K_W09
LO_03	Be able to analyse the ethical aspects of food production.	K_U07
LO_04	Understands and cares about the work ethic of the food technologist profession.	K_K04

3.3. Course content (to be completed by the coordinator)

A. Lectures

Content outline
Food hygiene and hygiene concept. Fundamentals of security guarantee systems and quality in food production processes.
Good Manufacturing Practice - GMP, Good Practice Hygienic - GHP, Good Laboratory Practice - GLP, HACCP system
Biological pollutants. Parasitic diseases. Microbiological hazards (pathogens). Fundamentals of prognostic microbiology.
EU legislation in the field of food safety and hygiene

B. Classes, tutorials/seminars, colloquia, laboratories, practical classes

Content outline
Microbiological safety analysis of meat products.
Isolation of pathogenic bacteria from meat products.
DNA isolation from pathogenic bacteria.

Preparing of PCR reaction.
Molecular identification of pathogenic bacteria in food products using by electrophoresis method.
Microbiological safety analysis of meat products.

3.4. Methods of Instruction

Lecture with multimedia presentation.
Laboratory: performing experiments, designing experiments, working in groups.

4. Assessment techniques and criteria

4.1 Methods of evaluating learning outcomes

Learning outcome	Methods of assessment of learning outcomes (e.g. test, oral exam, written exam, project, report, observation during classes)	Learning format (lectures, classes,...)
LO-01	Colloquium, written, assessment, exam	Lectures, exam
LO-02	Colloquium, written, assessment, exam	Lectures, exam
LO-03	Colloquium, written, assessment, exam	Lectures, exam
LO-04	Colloquium, written, assessment, exam	Lectures, exam

4.2 Course assessment criteria

A prerequisite for passing a course is the achievement of all the assumed learning outcomes. A positive grade in the course is determined by the number of points obtained in examinations (>50% of the maximum number of points):): 2,0 (f); 50 % <; 3,0 (e) 51 - 65%; 3,5 (d); 66 - 75%, 4,0 (c); 76 - 85%, 4,5 (b); 86 - 92%; 5,0 (a) 93-100%.

5. Total student workload needed to achieve the intended learning outcomes – number of hours and ECTS credits

Activity	Number of hours
Scheduled course contact hours	30
Other contact hours involving the teacher (consultation hours, examinations)	20
Non-contact hours - student's own work (preparation for classes or examinations, projects, etc.)	75
Total number of hours	125

Total number of ECTS credits	5

* One ECTS point corresponds to 25-30 hours of total student workload

6. Internships related to the course/module

Number of hours	0
Internship regulations and procedures	0

7. Instructional materials

Compulsory literature: 1.Food Safety and Food Quality, R E Hester, 2021, Royal Society of Chemistry, ISBN: 0854042709 2. Regulating and Managing Food Safety in the EU, Bremmers Harry, 2018, Springer-Verlag GmbH, ISBN: 3319770438 3. Fundamental Food Microbiology By Bibek Ray, Arun Bhunia, 2014, CRC Press, ISBN 9781466564435
Complementary literature: 1. Sokołowicz Zofia, Augustyńska-Prejsnar Anna, Krawczyk Józefa, Kačániová Miroslava, Kluz Maciej, Hanus Paweł, Topczewska Jadwiga.Technological and Sensory Quality and Microbiological Safety of RIR Chicken Breast Meat Marinated with Fermented Milk Products, Animal, 2021 : Vol. 11, iss. 11

Approved by the Head of the Department or an authorised person