

MODUL	FOOD 3S.2	COURSE TITLE	Food Quality and Safety		ECTS	5
FACULTY COORDINATOR	prof.dr hab. Z.Krejpcio	DEPARTMENT	Chemistry; Department of Food Quality and Safety			
TEACHER		Prof. dr hab. Kinga Stuper-Szablewska; dr inż. Tomasz Szablewski				
VOLUME (H)	75			PERSONAL WORK (H)	50	
LECTURE (H)	LAB (H)	PLACEMENT (H)	PROJECT (H)	OTHER MODALITIES (H)		
30	30	15	0	0		
EVALUATION			TEACHING METHODS			
EVALUATION MODALITIES			Lecture with multimedia presentation			
ORAL INDIVIDUAL REPORT			Demonstrations			
WRITTEN INDIVIDUAL REPORT			Focused discussion			
FINAL ORAL EXAM			Case studies			
FINAL WRITTEN EXAM			100%	Laboratory analysis		
COMMENTS OF EVALUATION						
The exam is conducted in the form of a written test containing test questions.						
SEMESTER (WINTER/SUMMER)			LANGUAGE			
SUMMER			ENGLISH			
<b>OBJECTIVES</b>						
The aim of the course is to provide students with comprehensive knowledge about the principles of food quality and safety, including the assessment of raw materials, production processes, and final products. The course covers methods for detecting contaminants, evaluating nutritional value, and ensuring compliance with international food safety standards. Students will learn to apply analytical techniques for monitoring technological processes and quality control, as well as risk assessment procedures to prevent foodborne hazards.						
<b>CONTENTS</b>						
<b>Lectures</b>						
1. Introduction to selected aspects of food quality and safety. GMP's and GHP's characterizations						
2. HACCP System – characterization and implementation. ISO Standards in food production						
3. Biological hazards – characterisation and limitation						
4. Environmental impacts of food production						
5. Chemical hazards – characterization and limitation						
6. Modern methods of analyzing hazards of food production						
7. Mycotoxins: occurrence, characteristics						
8. Physical hazards – characterization and limitation						
9. Mycotoxins: detection methods						
<b>Laboratory</b>						
1. Practical classes with HACCP documentation						
2. Analysis of microscopic fungi contamination and mycotoxins in food chain production – part 1: samples preparation – chemical laboratory						
3. Analysis of microscopic fungi contamination and mycotoxins in food chain production – part 3: chromatographic analysis						
4. Environmental impacts of food production						
5. Visiting to food production and distribution companies and engage in case study exercises to analyze real-world challenges in food quality, safety, and risk management.						
PRE-REQUISITES			Food Characteristics			