



SZKOŁA GŁÓWNA
GOSPODARSTWA
WIEJSKIEGO

Food Processing Laboratory

Educational subject description sheet

Basic information

Field of study Course Offer for exchange students - second cycle studies, including uniform master studies (MA programmes) Speciality - Organizational unit Course Offer for exchange students Study level second cycle studies, including uniform master studies (MA programmes) Study form full-time studies Education profile General academic		Didactic cycle 2024/25 Subject code PWMPWM2S_D.B100000P.06402.24 Lecture languages english Mandatory Elective subjects Block Basic subjects Disciplines Food technology and nutrition
Coordinator	Monika Marcinkowska-Lesiak	
Teacher	Monika Marcinkowska-Lesiak	
Period Winter semester	Examination Pass with grade Activities and hours Laboratory exercises: 60	Number of ECTS points 5

Goals

Code	Goal
C1	The course "Food Processing Laboratory" provides hands-on experience in various food processing techniques essential for understanding and mastering food production. Divided into 10 parts, each spanning 6 hours, students will engage in theoretical and practical sessions covering a wide range of food processing methods. Through these laboratory exercises, students will develop the skills necessary for: sausage making, canned product production, yogurt processing, bread making, juice production, emulsion manufacturing, pasta production, fermented food production, oil processing, confectionery production or others. By the end of the course, students will be proficient in the fundamental principles and techniques of food processing, enhancing their employability in the food industry.

Entry requirements

The student should have a general knowledge of food technology and basic technologies used in the food industry.

Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
Knowledge - Student knows and understands:			
W1	Assess the impact of various food processing methods on product quality		Report, Test (written or computer based)
W2	Demonstrate knowledge of food processing technologies		Report, Test (written or computer based)
Skills - Student can:			
U1	Utilize and analyze information on food processing techniques and materials		Report, Test (written or computer based)
Social competences - Student is ready to:			
K1	Can work in a group dedicated to solving the problem of food production		Report

Study content

No.	Course content	Subject's learning outcomes	Activities
1.	Divided into 10 parts, each spanning 6 hours, students will engage in theoretical and practical sessions covering a wide range of food processing methods. Through these laboratory exercises, students will develop the skills necessary for: sausage making, canned product production, yogurt processing, bread making, juice production, emulsion manufacturing, pasta production, fermented food production, oil processing, confectionery production or others. By the end of the course, students will be proficient in the fundamental principles and techniques of food processing, enhancing their employability in the food industry.	W1, W2, U1, K1	Laboratory exercises

Course advanced

Activities	Methods of conducting classes
Laboratory exercises	Laboratory (experiment), learning by experiment, Observation

Activities	Examination method	Percentage
Laboratory exercises	Report	50%
Laboratory exercises	Test (written or computer based)	50%

Activities	Credit conditions
Laboratory exercises	Number of points obtained from written tests - 50% Number of points obtained from reports - 50%

Literature

Obligatory

1. Food Processing Technology: Principles and Practice - P.J. Fellows
2. Food Process Engineering and Technology - Zeki Berk
3. Introduction to Food Engineering - R. Paul Singh, Dennis R. Heldman

Optional

1. Unit Operations in Food Processing - R. L. Earle
2. Food Processing Technologies: Impact on Product Attributes - Amit K. Jaiswal
3. Sustainable Food Processing and Engineering Challenges - Charis M. Galanakis
4. Handbook of Food Processing, Two Volume Set - Varzakas i Tzia
5. Food Science and Technology: Objective Type Question Answers Book - Sakhale, Giri

Calculation of ECTS points

Activity form	Activity hours*
Laboratory exercises	60
Preparation for exercises	40
Preparing a report	30
Student workload	Hours 130
Number of ECTS points	ECTS 5

* hour means 45 minutes