



02S20-ZPSZ
ECTS: 2.00
CYCLE: 2024L

Course syllabus - part A

Processing of animal raw materials

SUBJECT MATTER CONTENT

LECTURE

Main technological processes in the processing of raw materials of animal origin and their impact on product quality. The most important food additives and processing aids. Food preservation methods with elements of storage.

CLASSES

Basics of production technology for the main groups of meat and dairy products and management of by-products. The influence of individual technological processes on product quality.

TEACHING OBJECTIVE

The aim of the subject is: to provide knowledge in the field of general technology of production of the main groups of meat and dairy products and management of by-products; to draw attention to the relationship between the quality of the raw material and technological processes and the quality of the final product.

DESCRIPTION OF THE LEARNING OUTCOMES OF THE COURSE IN RELATION TO THE DESCRIPTION OF THE CHARACTERISTICS OF THE SECOND LEVEL LEARNING OUTCOMES FOR QUALIFICATIONS AT LEVELS 6-8 OF THE POLISH QUALIFICATION FRAMEWORK IN RELATION TO THE SCIENTIFIC DISCIPLINES AND THE EFFECTS FOR FIELDS OF STUDY:

Symbols for outcomes related to the discipline:

R/ZRA_P7S_KK++, R/ZRA_P7S_UW++,
R/ZRA_P7S_WG++

Symbols for outcomes related to the field of study:

KA7_KK1+, KA7_UW10+, KA7_WG14+,
KA7_UW6+, KA7_WG9+, KA7_KK2+

LEARNING OUTCOMES:

Knowledge:

W1 - Student knows the equipment and technological processes used in meat and milk processing.

W2 - The student knows the most important groups of meat and dairy products and the general technology of their production.

Skills:

U1 - Student is able to analyse the impact of raw material quality and technological processes applied on the quality of selected animal products.

U2 - The student is able to plan basic technological processes related to the processing of raw materials of animal origin.

Social competence:

K1 - Students are ready to deepen their knowledge due to the

Legal acts specifying learning outcomes: 194/2022

Disciplines: animal science and fisheries

Status of the course:

Obligatoryjny
Group of courses: B - przedmioty kierunkowe
Code: ISCED 0811

Field of study: Animal Science

Scope of education: Animal Breeding and Management, Biotechnology in Animal Breeding, Fodder Mix Production and Nutrition Consulting, Quality Management Systems for Food Products of Animal Origin

Profile of education: General academic

Form of studies: full-time

Level of studies: second degree studies

Year/semester: 1/1

Types of classes: Lecture, Classes

Number of hours in semester: Lecture: 15.00, Classes: 14.00

Language of instruction: Polish

Introductory subject: no requirements

Prerequisites: no requirements

Name of the organisational unit conducting the course:

Katedra
Towaroznawstwa i
Przetwórstwa Surowców
Zwierzęcych

Person responsible for the realization of the course:

dr inż. Rafał Winarski

e-mail:

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Additional remarks: The course only in Polish language.

awareness of constant progress in the processing of raw materials of animal origin.

K3 – Student is ready to work independently and in a team to carry out assigned tasks.

TEACHING FORMS AND METHODS:

Classes(W1;W2;U1;U2;K1;K3):Auditorium exercises: multimedia presentation Laboratory exercises: practical classes on the basics of animal raw material processing technology and evaluation of selected animal products.

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Colloquium test) - Evaluation of written expression on topics presented during lectures. -

Classes (Colloquium test) - Auditorium exercises: Evaluation of written expression on the topics covered in auditorium exercises. -

Classes (Write-up) - Laboratory exercises: Assessment of the report on the practical work performed. -

BASIC LITERATURE:

1. Litwińczuk Z., *Surowce zwierzęce - ocena i wykorzystanie.*, Wyd.

Państwowe Wydawnictwo Rolnicze i Leśne, R. 2004

2. Litwińczuk Z., *Towaroznawstwo surowców i produktów zwierzęcych z podstawami przetwórstwa*, Wyd. Powszechne Wydawnictwo Rolnicze i Leśne, R. 2012

3. Olszewski A., *Technologia przetwórstwa mięsa.*, Wyd. Wydawnictwo Naukowe PWN, R. 2020

4. Ziajka S., *Mleczarstwo.*, Tom 1, Wyd. Wydawnictwo UWM w Olsztynie, R. 2005

SUPPLEMENTARY LITERATURE:

1. Czerniawski B., Michniewicz J., *Opakowania żywności.*, Wyd. Agro Food Technology sp. z o. o., R. 1998

2. Gruda Z., Postolski J., *Zamrażanie żywności.*, Wyd. Wydawnictwo Naukowo Techniczne, R. 1999

3. Dzwolak W. Ziajka S., *Podstawy zapewnienia bezpieczeństwa żywności w systemie HACCP.*, Wyd. Wydawnictwo Studio 108, R. 2001

Detailed description of ECTS credits awarded - part B

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The number of ECTS credits awarded consists of:

1. Contact hours with the academic teacher:

- participation in: Lecture	15.0 h
- participation in: Classes	14.0 h
- consultation	2.0
Total:	31.0 h.

2. Independent work of a student:

Preparing for exercise.	5.00 h
Preparation of laboratory exercise reports.	5.00 h
Preparation for the colloquium.	15.00 h

Total: 25.0 h

contact hours + independent work of a student Total: 56.0 h

1 ECTS credit = 25-30 h of an average student's work, number of ECTS credit = $56.0 \text{ h} : 28.0 \text{ h/ECTS}$
= 2.00 ECTS on average: 2.0 ECTS

- including the number of ECTS credits for contact hours with the direct participation of an academic teacher: 0,00 ECTS points,

- including the number of ECTS credits for hours of independent work of a student: