

# Technology of meat and meat products (IV<sup>th</sup> Year of study, VIII<sup>th</sup> SEMESTER)

**Credit value (ECTS) 4**

## **Course category**

Domain (Imposed)

## **Course holder:**

**Assist. Prof. Dr. Roxana Lazăr, PhD**

## **Discipline objectives (course and practical works)**

The course aims the acquirement by the students of knowledge about designing technological slips and obtaining the semi products used in the food industry, of raw and auxiliary materials, stages of technological flows in obtaining the products, the usage of starter cultures and microorganisms. As well, is necessary the assimilation of technologies for obtaining cans and semi-cans.

In practical work, students acquire the working principles on the organoleptic and physico - chemical analysis necessary to characterize the quality of the products.

## **Contents (syllabus)**

<b>Course (chapters/subchapters)</b>
Cutting-boning-picking the meat
Obtaining semipro ducts: forcemeat
Classification of meat products
Raw materials used to obtain meat products
Auxiliary materials used to obtain meat products
Materials used to obtain meat products
Protein derivatives used in the meat industry
Protein derivatives of animal origin
Protein derivatives of vegetal origin
General manufacturing technologies for meat products: salami and sausages
Stages of the technological flow chart for obtaining meat products
Modern technologies in manufacturing some meat products
Manufacturing meat products by coextrusion technique
Manufacturing aerated meat products
Manufacture of sausages without membranes
Manufacturing technology for raw meat products
Classification of raw meat products
Manufacturing technology for raw-smoked-dried-matured meat products
Manufacturing technology for raw and dried meat products
Salami and raw sausage microflora
Technology of starter cultures
Processing technology of by-products and waste in meat industry
Processing technology for heads
Processing the organs
Processing the by-products - offal
Processing technology for intestines
Manufacturing technology for semi cans

Manufacturing technology for cans
Quality management systems for the industry of meat and meat products

Practical works
Sensory characteristics of meat products
Sanitation assessment of meat products
Determination of the physical parameters of meat products
Quality assessment of edible organs
Defects in meat products
Determination of protein
Determination of sodium chloride
Membranes used in meat industry
Determination of nitrites, nitrates
Determination of gross chemical composition of meat products
Determination of fat – Soxhlet method
Determination of pH
Examination of animal fats
Practical application in slaughter technological flow chart and manufacturing meat products

### References

1. Banu C., Tofan I., Antoaneta Stoicescu - Progrese tehnice, tehnologice și științifice în industria alimentară. vol I, Ed. Tehnică București, 1992.
2. Banu C., Oprea Al., Dănicel Gh. - Îndrumător în tehnologia produselor din carne. Ed. Tehnică, București. 1985.
3. Banu C., Alexe P., Camelia Vizireanu - Procesarea industrială a cărnii. Ed. Tehnică, București, 2003.
4. Coțofan V.și col - Anatomia animalelor domestice. vol I,III, Ed.Orizonturi universitare , Timișoara, 2002
5. Cuciureanu Rodica - Chimia și igiena mediului și alimentului. Ed. Gr. T. Popa , Iași, 2003
6. Georgescu Gh., Banu C. - Tratat de producerea, procesarea și valorificarea cărnii. Ed. Ceres, 2000.
7. Moțoc D., Banu C. - Biochimia cărnii și a subproduselor. Ed.Tehnică , București ,1966.
8. Neamțu G. - Biochimie alimentară . Ed. Ceres, 1977.
9. Negrea A. -Tehnologia, calitatea și controlul sanitar veterinar al produselor de origine animală. Ed. Moldogrup, Iași, 2001.
10. Oțel I. - Tehnologia produselor din carne. Ed.Tehnică , București, 1979.
11. Paștea E. - Atlas pracic de anatomie veterinară. Ed. Ceres, București, 1979.
12. Savu C., Mihai Gabriela - Controlul sanitar veterinar al alimentelor. Ed. Ceres, 1997.
13. Bondoc I., Șindilar E.V., 2002. Controlul sanitar veterinar al calității și salubrității alimentelor. Volumul I. Ed. ”Ion Ionescu de la Brad”, Iași.

## Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Examination	Oral examination	70%
Appreciation of the activity during the semester	Oral assessment during the semester, verification tests and final laboratory colloquium.	30%

## Contact

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