Course Unit Descriptor

Study Programme: Food Engineering	
Course Unit Title: Meat technology	
Course Unit Code: O6TKXO3	
Name of Lecturer(s): Full professor Vladimir Tomović, PhD	
Type and Level of Studies: Bechelor Academic Degree	
Course Status (compulsory/elective): Compulsory	
Semester (winter/summer): Summer	
Language of instruction: English	
Mode of course unit delivery (face-to-face/distance learning): Face-to-face	
Number of ECTS Allocated: 6	
Prerequisites: None	

Course Aims:

Introducing students with main technological operations in the process of meat production with respect to the animal welfare and the principles of hygiene, as well as with influence of pre-mortem, ante-mortem and post-mortem factors on meat quality.

Learning Outcomes:

Achieving basic knowledge and acquiring certain skills necessary for work in the meat industry, as well as in scientific, professional, control, project and pedagogical institutions.

Syllabus:

Theory

Definition of meat. Global meat production and consumption. The role of meat in the human health diet. Species of meat animals and their grades and characteristics. Infectious and parasitic diseases of livestock. Pre-slaughter animal handling practices. Slaughterhouse. Slaughter-line operation. Collecting and processing animal by-products. Animal carcass grading. Carcass chilling. The structure and chemical and biochemical constitution of muscle (meat). Post-mortem biochemical changes in muscle and meat quality development. Development of abnormal meat quality characteristics. Cutting, categorizing, deboning, packing and storage of meat.

Practice

Anatomy of meat animals - osteology, myology, splanchnology. Good manufacturing and hygiene practices in slaughterhouse. Sensory evaluation of fresh and cooked meat. Determination of technological quality of meat. Determination of chemical composition of meat. Comparable presentation of slaughter-lines and cutting and deboning lines for pig, cattle, chicken and other slaughter animals. Technological calculations and material balances in meat technology.

Required Reading:

R. A. Lawrie, D. A. Ledward: Lawrie's meat science (7th ed.), Woodhead Publishing Ltd. and CRC Press LLC, Cambridge, England, 2006.

W. K. Jensen, D. Carrick, M. Dikeman (Eds.): Encyclopedia of meat sciences, Elsevier Ltd, Oxford, England, 2004.

Weekly Contact Hours: 6	**Lectures:** 3	**Practical work:** 3

Teaching Methods:

Interactive lectures, group or individual consultations, experimental exercises in laboratory and in plant.

Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	**Final exam**	points
Active class participation		written exam	-
Practical work	25	oral exam	30
Preliminary exam(s)	45	…….	
Seminar(s)	-		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			