

SYLLABUS (OF A COURSE/MODULE)

Course/module (as specified in the approved curriculum for the field of study) Module 5 – Biofood and quality of animal products		ECTS 7	Catalogue number
Name in Polish Moduł 5 – Biożywność oraz jakość produktów pochodzenia zwierzęcego			
Unit(-s) providing the course/module (Institute/Department) Department of Animal Breeding and Product Quality Assessment			
Head of course/module prof. dr hab. Piotr Ślósarz			
Field of study Animal Husbandry	Level II – master studies	Profile Academic-general	Semester II
Specialisation Animal Production Management	MSc Specialisation Animal Production Management		
TYPE OF CLASSES/LECTURES AND THE NUMBER OF HOURS (organised classes/lectures and self-study)			
Type of studies: full-time		Type of studies: extramural	
- lectures	30	- lectures	
- practical total	50	- classes	
- laboratory practical	20	-	
- project based practical	10	-	
- Other – tutored	25	-	
- self-study	70	- Self-study	
Total number of hours:		175	Total number of hours:
OBJECTIVE OF COURSE/MODULE			
Expanding knowledge on the marketing of products of animal origin and processing of milk and meat			
TEACHING METHODS			
Lecture supported by multimedia presentation, exercises, discussion, presentation of case studies by students			
LEARNING OUTCOMES		Reference to field outcomes	Reference to area outcomes
Knowledge	E1 – Student has a thorough knowledge of the rules of trade in raw materials and products of animal origin on the national and international market. E2 – Has the necessary knowledge regarding the processing of products of animal origin. E3 – Student has knowledge of how to prepare an application for registration of the product on the list of traditional and regional products on the basis of national and EU level. E4 – Student knows the control systems in the processing of animal products in the EU countries.	Z2A_W03 Z2A_W04 Z2A_W12 InzA_W01 InzA_W02 InzA_W04 InzA_W05	R2A_W03 R2A_W04 R2A_W05
Skills	E5 – Student is able to independently prepare dairy products. E6 – Student shows solutions taking into account the various factors affecting the improvement of the quality of animal raw materials	Z2A_U07 Z2A_U09 Z2A_U10 Z2A_U12 InzA_U02 InzA_U05 InzA_U06 InzA_U08	R2A_U04 R2A_U05 R2A_U06 R2A_U07 R2A_U08 R2A_U09
Social competences	E7 – Student is able to work in a group. E8 – is aware of the responsibility for the production of high quality food and presents in this respect entrepreneurial and creative actions.	Z2A_K04 Z2A_K06 Z2A_K10 InzA_K01 InzA_K02	R2A_K02 R2A_K03 R2A_K05 R2A_K08

Methods to verify learning outcomes Test Evaluation of protocol and discussions on exercises Project evaluation	Outcome Reference Numbers E1, E2, E4 E5, E6, E7, E8 E1, E3, E8
TEACHING CONTENT	
<p>Content of lectures: Principles of marketing raw materials and dairy and meat products. Direct sales of products of animal origin and marginal, localized and restricted activity. Importance of regional and traditional products. Basic components of cow's, goats' and sheep's milk. The biological and energy value of different types of milk. Milk processing. Technological usefulness of different types of milk. Fermentation processes. Starter cultures and vaccines in milk processing. Production of cheese (rennet, acid, cottage cheese). Ripened cheese - hard and soft. Mold ripened cheese. Production of meat products. Technological cold meat categorization and characteristics. Discussion of selected cold meat recipes and basic processes in their production (pickling, grinding, mincing, blending, filling casings, mounting, smoking, roasting, steaming, cooling). Additives in meat processing. The influence of curing on the quality of meat and meat products. Packaging as an essential element in trade. Food labeling rules according to the latest EU regulations. Techniques for packaging food products. Safety of food packaging. Labelling. Basic requirements for providing food information to consumers.</p> <p>Content of exercises: Processing of milk. Fermented milk drinks (yogurt, kefir). Acid-rennet cheese. Production of quark and cottage cheese. The basic equipment used in the manufacture of cold meet. Discussion of selected meat recipes. Production of meats using traditional methods.</p> <p>Project: Development of application for entry of the product on the list of traditional and regional products on the basis of national and European Union</p>	
Forms and criteria for passing of course/module exercises - written test - passed from 51% project - completion	Percentage of final mark 80% 20%
LIST OF LITERATURE	
Basic literature 1. Microbiology of Animals and Animal Products, Woolcock J.B., Elsevier 2. http://www.cheesemaking.com/ 3. https://www.uoguelph.ca/foodscience/dairy-science-and-technology	