

Module title:	Technologies in animal production	ECTS	2
Polish translation:	Technologie w produkcji zwierzęcej		
Course:	Veterinary Medicine		

Module language: English		Stage: JM-FVM	
Form of studies: <input checked="" type="checkbox"/> intramural <input type="checkbox"/> extramural	Type of module: <input type="checkbox"/> basic <input type="checkbox"/> directional	<input checked="" type="checkbox"/> mandatory <input type="checkbox"/> elective	Semester:3..... <input checked="" type="checkbox"/> winter semester <input type="checkbox"/> summer semester
Academic year: 2023/2024		Catalogue number:	FVM-V-JMSS-03W-D64_23

Module coordinator:	Prof. dr hab. Mikołaj A. Gralak			
Teachers responsible for the module:	Academic teachers of the Institute of Veterinary Medicine, Department of Physiological Sciences; PhD students in accordance to the internal legal acts; other specialists if needed and possible.			
Objectives of the module:	<p>During the course, students are supposed to acquire basic procedures in animal technology like identification, decornuation etc.; the rules of handling of large animals; the problems associated with animal transportation; utilisation of by-products including waste from animal production.</p> <p><u>Lectures:</u> Introduction, safe zone of an animal, cattle handling - 4 h Procedures directly related to animal production like animal identification, dehorning, castration, hoof trimming - 6 h Artificial insemination, including semen collection, conservation and storage, embryo transfer - 2 h Technologies in beef production, including pasture systems - 4 h Dairy and veal production - 4 h Pig production, facilities, transportation challenge - 6 h Poultry production, technologies for incubation and hatching, farm systems - 4 h</p>			
Teaching forms, number of hours:	... Lectures; hours 30			
Teaching methods:	Detailed schedule will be defined by the coordinator of the course at the beginning of semester. Detailed organization of consultations will be defined by the coordinator of the course at the beginning of semester.			
Formal prerequisites and initial requirements:	Students should have the basic knowledge of animal husbandry and anatomy.			
Learning effects	Course outcomes:	Learning outcomes relative to the course outcomes	Impact on the course outcomes*	
Knowledge:	1	S. knows basic technologies of animal production and how to handle farm animals in safe and human way.		
	2	S. knows conditions of hygiene and appropriate utilisation and disposal of animal by-products.		
	3	S. knows management of waste from animal production and a risk for environment,		
	4	S. recognizes conditions of animal welfare.		
Skills:	1	S. can recognize and evaluate the animal health problems descending from production technology		
	2	S. can evaluate the influence of the technology on quality of the products of animal origin.		
Competences:	1	S. can advise farmer how to improve his farm facilities.		
	2	S. can ordain information on proper technology.		

Objectives of the module required to obtain learning effects:	
Assessment methods:	Attendance to lectures (at least 80% frequency required). Positively graded written final test, five open questions a 5 points, minimum points required 13. Retake of the test will be held during the retake period in the same semester. No extra assessment methods are anticipated. In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.
Detail description of assessment methods;	... No extra assessment methods are anticipated.
Formal documentation of learning outcome:	eHMS entry. Records collected in the course portfolio i.e. individual records of student results, presence lists, database of oral and written questions, written assessments of the students.
Elements impelling final grade:	Attendance to lectures. A positive result of the final test (3 – 5).
Teaching base:	Facilities of the Faculty
Mandatory and supportive materials :	
1. Subjects presented during lectures (students are obligated to make adequate notes during lectures)	
2. Text book: Campbell J.R., Kenealy M.D., Campbell K.L.: ANIMAL SCIENCES; The Biology, Care, and Production of Domestic Animals, 3rd ed. or newer	
3. Relevant scientific publications, including those of the module coordinator. ...	
ANNOTATIONS	
No electronic devices can be used during lectures.	

* 3 – complete and detailed, 2 – moderate, 1 – basic.

Quantitative summary of the module:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module - base for quantifying ECTS:	...50..... h
Total ECTS points, accumulated by students during contact learning:1.... ECTS