Syllabus

Module title:	Milk hygiene	ECTS	2
Polish translation:	Higiena mleka		
Course:	Veterinary medicine		

Module language:	English				Stage:	JM-FVM
Form of ■ intramural studies: □ extramural	Type of module:	 □ basic ■ directional 	mandatory elective	Semester: 10		winter semestersummer semester
			Academic year:	2020/2021	Catalogue number:	FVM-V-JMSS-10S-D24_20

Module coordinator:	dr Joanna Zarzyńska				
Teachers responsible for the module:	Teachers of the Department of Food Hygiene and Public Health Protection or external experts while needed				
Unit responsible for the module:	Department of Food Hygiene and Public Health Protection				
Faculty in charge:	Faculty of Veterinary Medicine				
Objectives of the module:	The objective of the course is to prepare students for work in the veterinary inspection service at milk farm level and dairy.				
Teaching forms, number of hours:	a) Lectures; hours 15; b) Laboratory classes; hours 15;				
Teaching methods:	Multimedia presentations, laboratory tests for raw milk and dairy products 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:	Animal anatomy modules 1-2, Histology and embryology modules 1-2, Chemistry, Biochemistry modules 1-2, Veterinary microbiology modules 1-2, General and veterinary genetics, General toxicology, Veterinary epidemiology, Hygiene of food of animal origin – module I Knowledge in above-mentioned subjects				
Learning outcomes:	Knowledge: describes and interprets methods of consumers health prevention by the appropriate organ responsible for the production of milk and dairy products describes, interprets and evaluates conditions of hygiene and technology of production, food safety, also uses appropriate law regulations of the veterinary supervision describes and implies HACCP (Hazard Analysis and Critical Control Points) procedures	Skills: can perform examination of raw milk and dairy products	Competences: can cooperate with specialists of other professions for the protection of public health		
Assessment methods:	Final tests at the end of semester. Open questions (short answers) at least 60 % to pass. No extra assessment methods are anticipated. In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.				
Formal documentation of learning outcomes:	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:	Final grade can be increased by 0.5 for preparing a good presentation, high activity during classes, good record keeping and attending lectures.				
Teaching base:	eaching base: Aulas and classes of IVM				
Mandatory and supportive materials :					

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1. Arvanitoyannis I. S. (2009). HACCP and ISO 22000: Application to Foods of Animal Origin (Institute of Food Science and Technology Series). Blackwell Science.

2. Bibek Ray & Arun Bhunia: *Fundamental food microbiology*. Fourth Edition. CRC Press 2007.

3. Britz T.J., Robinson R.K.: (2008) Advanced dairy science and technology. Blackwell Publishing Ltd.

4. Doyle M.P., Beuchat L.R., Montville T.J.: (2001). Food Microbiology: fundamentals and frontiers 2nd Edition. ASM Press, Washington, D.C.

5. Mc Landsborough L. (2005). Food Microbiology Laboratory. CRC Press.

6. Schmidt R.H., Rodrick G.E: Food safety handbook. USA 2003, Ed. John Wiley & Sons, Inc., USA

The current legislation of the European Union related to food (EUR – lex) and international legislation (Codex Alimentarius).
 Web-sites: http://www.International Dairy Federation, http://www.International Dairy Foods Association, http://www.fao.org Relevant scientific publications including those of the module coordinator.

ANNOTATIONS

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:		
Total ECTS points, accumulated by students during contact learning:	1 ECTS	

Learning outcomes of the module relative to the learning outcomes of the subject:

Outcome category	Learning outcomes:	Learning outcomes relative to the course outcomes	Impact on the each of course outcomes ^{*)}
Knowledge -	describes and interprets methods of consumers health prevention by the appropriate organ responsible for the production of milk and dairy products	W_HŻ1	3
Knowledge -	describes, interprets and evaluates conditions of hygiene and technology of production, food safety, also uses appropriate law regulations of the veterinary supervision	W_HŻ2	3
Knowledge	describes and implies HACCP (Hazard Analysis and Critical Control Points) procedures	W_HŻ4	3
Skills	can perform examination of raw milk and dairy products	U_PUZ16	3
Competence	can cooperate with specialists of other professions for the protection of public health	К_КР9	2