
Course title: MILK HYGIENE

ECTS credit allocation (and other scores): 3

Semester: spring

Level of study: ISCED-7- long-cycle programmes (EQF-7)

Branch of science: Agricultural sciences

Language: English

Number of hours per semester: 30 h (classes), 15 h (lectures)

Course coordinator/ Department and e-mail: Prof. Joanna Szteyn e-mail: joanna.szteyn@uwm.edu.pl /Department of Veterinary Public Health Faculty of Veterinary Medicine University of Warmia and Mazury in Olsztyn

Type of classes: classes and lectures

Substantive content

CLASSES: Veterinary Inspection in supervising of the milk chain. Sensory testing of milk. Milk sampling Determination of freshness. Microbiological examination of raw milk. Somatic cells in raw milk. Examination of raw milk adulteration. Approval and Registration Rules. Instrumental methods for testing raw milk. System for monitoring chemical and biological impurities of milk and milk products. Approval and registration of milk processing plants. HACCP system. Microbiological criteria for process hygiene and product hygiene. Requirements of local, marginal and limited production. Legal conditions for direct sales of milk and dairy products.

LECTURES: Milk production in the World and in Poland. The nutritional value of milk. Factors affecting : composition, hygienic quality and technological usability of milk. Species differences in nutrient content. Physico - chemical properties of milk. Organoleptic defects in raw milk. Milk microflora , its origin, hygienic and technological significance . The influence of mastitis on safety and technological usefulness of dairy raw material. Criteria of evaluation of raw milk. Good Production Practice on dairy farms. Basic operations and technological processes in dairy industry. Traditional dairy products: registration method, European and national list, PDO,PGI, TSG.

Learning purpose:

On completion of the study programme the graduate will gain:

Knowledge: conditions of hygiene, technology and milk products safety; veterinary supervision; procedures related to HACCP

Skills: Supervises primary production; creates HACCP procedures; analyzes the results of laboratory tests

Social Competencies: collaboration in the field of public health protection; teamwork; applying ethical principles

Basic literature: 1)Hygiene in Milk Production, Processing and Distribution, World Health Organization Geneva .1962 2)R. J. Campbell, T.R. Marshall, The Science of Providing Milk for Man, 1975. 3)McGraw -Hill.Inc A Practical Guide for Milk Producers Prepared by the Food Standards Agency 2013

Supplementary literature: 1) Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety OJ L 31, 1.2.2002, p. 1–24 2) Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for

food of animal origin OJ L 139, 30.4.2004, p. 55–205 3) Commission Regulation (EC) No 2073/2005 of 15 November 2005 on microbiological criteria for foodstuffs (Text with EEA relevance) OJ L 338, 22.12.2005, p. 1–26

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 1.8 h

Student's independent work: 1.2 h