

# Laboratory examinations of food of animal origin

ECTS: 1.00

# SUBJECT MATTER CONTENT

#### CLASSES

Laboratory diagnosis of food with the use of immunoenzyme methods. Obtaining genetic material of microorganisms isolated from food. The use of the PCR method in the isolation of microorganisms in food of animal origin. Determination of microorganisms in food by Real-Time PCR.

#### LECTURE

Application of biochemical tests in the identification of microorganisms isolated from food.

# **TEACHING OBJECTIVE**

Learning about laboratory methods of testing raw materials and food products in the food chain in order to guarantee food safety and protect the health and life of the consumer.

DESCRIPTION OF THE LEARNING OUTCOMES OF THE COURSE IN RELATION TO THE DESCRIPTION OF THE CHARACTERISTICS OF THE SECOND LEVEL LEARNING OUTCOMES FOR QUALIFICATIONS AT LEVELS 6-8 OF THE POLISH QUALIFICATION FRAMEWORK IN RELATION TO THE SCIENTIFIC DISCIPLINES AND THE EFFECTS FOR FIELDS OF STUDY:

Symbols for outcomes related to the	R/WA_P7S+++
discipline:	

Symbols for outcomes related to the field of study:

B.U6. +, K.10.+, K.5+, K.11.+, A.U16. +, B.W6. +, A.W18. +, K.9.+, B.W4. +, A.W15. +

### LEARNING OUTCOMES:

#### Knowledge:

W1 – knowledge about the risks associated with the presence of harmful factors in food of animal origin, knowledge about the law on food safety, understands the purposefulness of actions taken to protect public health

#### Skills:

U1- ability to organize a workplace, taking into account the materials and equipment necessary to perform laboratory tests, ability to analyze and interpret the results of laboratory tests of food of animal origin

### Social competence:

K1 – responsibility for the actions taken, readiness to update knowledge and improve professional skills, readiness to introduce organizational solutions that improve the quality of work

### **TEACHING FORMS AND METHODS:**

Legal acts specifying learning outcomes: 682/2020 Disciplines: Veterinary science Status of the course: Fakultatywny Group of courses:B - przedmioty kierunkowe Code: ISCED 0841 Field of study: Veterinary Medicine Scope of education: Profile of education: General academic Form of studies: full-time Level of studies: uniform master's studies Year/semester: 4/8

Types of classes: Classes, Lecture Number of hours in semester:Classes: 10.00, Lecture: 5.00 Language of instruction: Polish Introductory subject: Microbiology, Epidemiology Prerequisites: Knowledge of the spread of infectious diseases, the influence of pathogens on the occurrence pathomorphological and physiopathological changes in the animal's organism, techniques of basic microbiological tests. Name of the organisational unit conducting the course:Katedra Weterynaryjnej Ochrony Zdrowia Publicznego

Person responsible for the realization of the course:dr hab. wet. Beata Wysok, prof. UWM e-mail: beata.wysok@uwm.edu.pl

Additional remarks:

Classes(W1;U1;K1;):Working with animal origin material in the laboratory based on instructions.

Lecture(W1;U1;K1;):Multimedia presentation

# FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Classes (Colloquium practical) - Assessment of work and cooperation in a team. Planning, preparation and carrying out of the experiment by students. Preparation of the report. During the final pass, not less than 65% of the possible points should be obtained. The grading of grades is based on the established score thresholds, i.e. assigning the grade to a specific range percentage of points that can be obtained. These thresholds are as follows: 94-100%, grade: very good (5.0); 87-93%, good plus (4.5); 80-86%, evaluation: good (4.0); 73-79%, grade: sufficient plus (3.5); 66-72%, evaluation: satisfactory (3.0); 65%, assessment: insufficient (2.0). The student may take the final credit twice. In the event of a top-down suspension of classroom classes and the necessity of distance learning, the methods of verifying the achievement of learning outcomes declared in the syllabus, i.e. the forms of passing the exam and exercises, may change in a manner appropriate to the situation. -

Lecture (Colloquium practical) - The lecture content is required during the practical test. -

# **BASIC LITERATURE:**

1. B. Krawczyk, R. Kotłowski, K. Stojowska, K. Szemiako, *Podstawy techniki PCR*, Wyd. wydaw. PG, R. 2012

2. Hosseini Samira, *Enzymelinked Immunosorbent Assay ELISA From A to Z*, Wyd. Springer, R. 2018

### SUPPLEMENTARY LITERATURE: