

UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN Faculty of Veterinary Medicine

Acquisition and sanitary estimation of bee products

ECTS: 1.00

SUBJECT MATTER CONTENT

LECTURE

Lectures include information on bee products, methods of collection, storage, and their value and usefulness to humans. Students get information related to base rewards, evaluation of the yelds of honey and pollen of different species of plants, the mechanism of honey production and other bee products production. Students learn the types of pollution of bee products and their falsification, as well as the national and EU requirements for collection, processing, storage and health assessment of bee products. We stress the impact of disease on quality of honey and other products. Students get information about influence of chemical pollution on the bees and bee products and information about usefulness of honey in human nutrition and medicine.

AUDITORIUM CLASSES

Students are familiarized with food supplies for bees, type of inflorescences, methods of pollination, collecting of pollen by bees and other insects, flights bees to nectar, honey creation mechanism. A practical recognition of species of honey, its behavior under various storage conditions.

PRACTICAL CLASSES

Students perform the determination of honey species in the laboratory in accordance with EU standards and learn how to recognize beeswax adulteration.

TEACHING OBJECTIVE

Acquainting with the basic issues concerning the development, use, testing, evaluation and marketing of bee products useful for humans and animals. The student will acquire the necessary information and skills for their proper use in their professional work.

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 discipline:

R/WA_P7S+++

K.1.+, A.U15. +, A.W10. +, K.7.+, A.U12. +, K.5+, A.W15. +

Symbols for outcomes related to the

field of study:

LEARNING OUTCOMES:

Knowledge:

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: Lecture, Auditorium classes, Practical classes **Number of hours in**

semester:Lecture: 7.00, Auditorium classes: 4.00, Practical classes: 4.00 Language of instruction:Polish Introductory subject: Biology,

Diseases of Beneficial Insects **Prerequisites:** Passed the exam in the subject of Diseases of Beneficial

Insects

Name of the organisational unit conducting the course:Katedra Parazytologii i Chorób Inwazyjnych Person responsible for the realization of the course:dr hab. wet. Maria Iller, prof. UWM, prof. dr hab. wet. Rajmund Sokół e-mail: rajmund.sokol@uwm.edu.pl maria.michalczyk@uwm.edu.pl

Additional remarks:

W1 – The student knows and understands the rules of using knowledge about bee products at various positions of a veterinarian. He knows the principles of the production of bee products. Knows their practical application. Finds, recognizes and analyzes knowledge in this field in veterinary practice in accordance with applicable regulations.

Skills:

 ${\sf U1-}$ The student is able to use and process information, applying the acquired knowledge and skills in everyday practice, taking into account appropriate research techniques. Can interpret the obtained research results, make the right decisions in relation to the applicable professional and legal standards

Social competence:

K1 – The social student is ready to perceive and recognize threats and make a self-assessment of deficits and needs of their own education with the use of available objective sources of information.

TEACHING FORMS AND METHODS:

Lecture(W1;U1;K1;):Lecture on a multimedia presentation, discussion Auditorium classes(W1;U1;K1;):Practical knowledge of the rules of testing bee products and storage conditions.

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Evaluation of the work and cooperation in the group) - 100% attendance at lectures -

Auditorium classes (Evaluation of the work and cooperation in the group) - At the end of the semester, a written competence test will be carried out. To pass the test, you must obtain at least 65% of possible points. The grading of ratings is based on scoring thresholds described in the faculty procedure "Principles of student assessment". The student may attempt to improve the test twice. The condition for receiving a final credit in the subject is to obtain a positive grade from the test. In the event of a top-down suspension of classroom classes and the need for 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. - Practical classes (Competention test) - -

BASIC LITERATURE:

1. Ostrowska W., Gospodarka pasieczna, Wyd. PWRiL, R. 1998, s. 382

SUPPLEMENTARY LITERATURE: