ENTOMOLOGY (III rd Year of study, Vth Semester)

Credit value (ECTS) 4

Course category

Domain (Imposed)

Course holder:

PhD. Assist. Monica Elena HEREA

Discipline objectives (course and practical works)

The content of the course in the discipline of Entomology, along with other specialized disciplines, contributes to the theoretical and practical training of future engineers.

Formation of the fundamental knowledge base necessary to understand and operate with notions specific to the field of entomology, but at the same time the discipline aims to know by students the main morphological and anatomical features of insects, biology, ecology and techniques to combat major pests of crops.

The formation of the capacities to identify, to formulate as well as to explain the problems specific to the field of entomology is through what it aims at the correct interpretation of the need for the efficient application of treatments for the prevention and control of reported pests.

The practical works aim to familiarize students with the work technique in entomology laboratories and to know the general notions regarding the systematics, morphology, physiology and ecological and reproductive features of harmful species found in mountain ecosystems.

Contents (syllabus)

Course (chapters/subchapters)

The object of study, the history and the importance of microbiology.

General characteristics of insects:

Body morphology in insects; Insect anatomy and physiology; Reproductive system.

Insect biology:

Reproduction in insects; Insect development; Generations and evolutionary cycle; Diapause.

Insect ecology:

Factors influencing insect development; Spread of insects.

Estimation of damages caused by pests:

Phytosanitary control; Damage and damage caused by crop pests.

Forecast and warning:

Elaboration of forecasts; Warning of treatment.

General methods of pest control:

Phytosanitary quarantine measures; Agrophytotechnical methods; Mechanical methods; Physical methods;

Biological means of pest control.

Classification of animal pests.

Practicum

The presentation of the General Entomology laboratory; work safety rules; Laboratory equipment and utensils; good practice working in entomology.

Insect morphology

Insect anatomy

Insect biology

Insect ecology

The dichotomous key to determining the main order of insects

Elaboration of the warning chart for chemical treatments.

Methods of pest prevention and control

References

- 1. Filipescu C., Georgescu T., Tălmaciu M., 1989 *Lucrări practice de Entomologie*. Partea generală. Uz intern, Iași.
- 2. Georgescu T., 1990 Curs de Entomologie. Partea generală și specială. Uz intern, Iași
- 3. Georgescu T., Tălmaciu M., 1994 Protecția plantelor viticole și pomicole. Curs de Entomologie. Uz intern, Iași.
- 4. Georgescu T., Tălmaciu M., Alexa C., 2003 *Dăunătorii plantelor horticole*. Prevenire și combatere. Editura PIM, Iași.
- 5. Ghizdavu I. și colab., 1997 *Entomologie agricolă*. Editura Didactică și Pedagogică R.A., București.
- 6. Perju T., 1995 Entomologie agricolă, componentă a protecției integrate a agrosistemelor. Editura Ceres, București.
- 7. Talmaciu M.,2002 Protectia plantelor Entomologie, curs, uz intern. U.S.A.M.V. Iasi.
- 8. Tălmaciu M., 2005 Entomologie agricolă, Editura Ion Ionescu de la Brad, Iași.

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Exam	Written examination	70%
Appreciation of the activity during the semester	Oral assessment during the semester, verification tests .	30%

Contact

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