Study programme: General Agronomy , Fruit growing and viticulture

Type and level of study: Bachelor's degree (240 ECTS) – First cycle

Course title: Entomology

Lecturer: Full Prof. Snežana Tanasković, PhD

Language of instruction: English

ECTS credits: 5

Prerequisite:

Semester: *summer*

Course objective To provide theoretical knowledge and practical skills in identifying and recognizing insect damage (direct and indirect damage) from phytopathological damages, nutrient excesses and deficiencies.

Learning outcomes The acquired competence in the visual diagnosis of damage in the field and storage resulting from the presence and activity of agricultural pests. Students will be able to recommend rational control measures in the chemical control of economically important insect pests. Other important outcomes include individual student capability of using professional literature, and possibilities for engagement in field, research or scientific work.

Course contents

Theoretical instruction

General characteristic of insect pests of plants (morphological, anatomical, physiological). Growth and development. Ecology. Epidemiology. Types of interaction (competition, predation, mutualism). Insect systematic. Economically important pests in agriculture. Life cycle of agricultural pests. Insect-plant interactions in the ecosystem. Population dynamics of pests. Levels of intervention. Monitoring and sampling. Types of traps. Types of control. Insecticides. Applications of different insecticides in agricultural production.

Practical instruction

Adult, larvae and symptoms identification of economically important pests in field crops, vegetable crops, fruit crops, grapes and storage products. Basic parameters of insecticide applications, compatibility, biological efficiency, calculations of toxicological effects, design of integrated plant protection programs.

Recommended reading Gullan, P.J. and Cranston, P.S. (2014): The insects: An outline of entomology. Fifth Edition. Wiley Blackwell, 1-987. England. Alford V.D. (1999): A textbook of Agricultural Entomology. Blackwell Science. 1-314. Robinson, J. (2003): Identification guide for Lepidopterian larvae commonly encountered on imported plant material. SCL, 1-70.

Hours of active teaching				**Other classes**
Lectures:	Practicals: 2x15=30	Other forms of teaching Tutorials 3x15=45	Individual work:	

Teaching methods Lectures are held in modernised classrooms using modern devices and teaching aids. Laboratory and practical sessions involve individual student work. Field work during the growing season provides practical training in trap placement, monitoring population dynamics, action thresholds and pest control measures. For term paper assignments, office hours are open for questions regarding the choice of topic and selection of relevant references.

Assessment (maximum points 100)

Examination requirements	**Points**	**Final examination**	**Points**
Class participation	5	oral examination	
Practical sessions/tests	15	written examination	**50**
Term paper assignments/homework	20	.....	
Project	10		
Other			

Grading system

Grade	**ECTS**	**Description**
10	**91-100**	Excellent
9	**81-90**	Exceptionally good
8	**71-80**	Very good
7	**61-70**	Good
6	**51-60**	Passing
5	**≤50**	Failing