# **Study Programme: PHYTOMEDICINE**

Course Unit Title: *PLANT VIROLOGY* 

Course Unit Code: 19.FTM028

Name of Lecturer(s): Prof. Ferenc Bagi, PhD

Type and Level of Studies: UNDERGRADUATE ACADEMIC STUDIES

Course Status (compulsory/elective): compulsory

Semester (winter/summer): winter

Language of instruction: Serbian/English

Mode of course unit delivery (face-to-face/distance learning): face-to-face

Number of ECTS Allocated: 4

**Prerequisites: General Phytopathology** 

**Course Aims:** 

Knowledge about economically important plant viral diseases and their control.

### **Learning Outcomes:**

The obtained knowledge is a base for practical use of different plant protection measures against viral diseases for the purpose of

reducing yield losses, meanwhile reducing environment contamination and unnecessary use of resources. Furthermore, gained

knowledge is a base for work in scientific research.

## Syllabus:

Theory

Plant virology: General virology: development of plant virology through history, economic importance, symptoms. Morphological, physical, biochemical, chemical and serological characteristics of viruses. Virus genome, gene expression. Virus replication. Virus nomenclature and classification. Plant resistance to virus diseases. Epidemiology. Control. Economically important plant virus diseases will be elaborated: distribution, physical and chemical characteristics, virus morphology, virus hosts, pathogenesis, symptomatology, economic impact, control measures.

Practice

Symptoms, morphological and patocytological changes on infected plants, virus transmission, artificial inoculation methods, biochemical constant's, virus purification, serological and molecular identification, electron microscopy.

**Required Reading:** Agrios, G. N. (2005): Plant pathology. Elsevier academic press, USA Bagi, F., Jasnić, S., Budakov, D. (2016): Plant Virology (In Serbian). University of Novi Sad, Faculty for Agriculture Hull, R. (2004): Matthew's plant virology. Elsevier academic press, USA

# Weekly Contact Hours: Lectures: 45 Practical work: 30

# **Teaching Methods:**

Visual - didactic methods with the use of modern teaching aids and laboratory equipment. Practical classes - individual work of students and demonstrative - illustrative methods.

### Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class		witten even	
participation		witten exam	
Practical work		oral exam	60
Preliminary exam(s)	30		
Seminar(s)	10		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam,			

project presentation, seminars, etc.