Course Unit Descriptor

Study Programme: Phytomedicine

Course Unit Title: ***DIAGNOSTICS OF PHYTOPATHOGENIC MICROORGANISMS***

Course Unit Code: 19.FT1018

Name of Lecturer(s): Prof. Vera Stojšin, PhD; Assoc. Prof. Dragana Budakov, PhD

Type and Level of Studies: UNDERGRADUATE ACADEMIC STUDIES

Course Status (compulsory/elective): elective

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: 6

Prerequisites: General Phytopathology

Course Aims:

To acquire basics methods for detection and identification in plant pathology, as well as analyses of similarity among plant pathogens (symptomatology, classic and modern serological and molecular methods).

Learning Outcomes:

Knowledge of necessary techniques that have to be used for detection and identification of pathogens, that are logical extension of classic methods of determination which are based on morphological, growth properties, pathogenicity and other characteristics of plant pathogens. Ability to work in modern plant pathology laboratories.

Syllabus:

Theory

Symptoms of plant diseases. Latent infections. Sampling of plant material with or without disease symptoms. Conventional, serological and molecular methods of detection and identification of plant pathogens (fungi-like microorganisms, fungi, viruses, bacteria, phytoplasmas).

Practice

Sampling of plant material with or without disease symptoms. Preparation of samples for analyses. Detection of pathogens using modern techniques directly from plant tissue. Isolation of pathogens from infected plant materials. Detection and identification of pathogens using serological and molecular methods.

Required Reading: Agrios, G.N. (2005): Plant Pathology. Elsevier, Academic Press, USA.

Babović, M. (2003): Basics of plant pathology (in Serbian). University of Belgrade, Faculty of Agriculture.

Vico, I. (2018): Phytopathology (in Serbian). University of Belgrade, Faculty of Agriculture, Zemun.

Weekly Contact Hours:	**Lectures: 1x15=15**	**Practical work: 2x15=30**

Teaching Methods:

Lectures – oral lectures with visual method of presentation using computer, usage of others didactic methods (demonstrations, illustrations, board visuals).

Practical classes - lectures with visual method of presentation using computer, managing independent work of students, usage of different laboratory and other experimental phytopathological methods in pathogen identification, consultations.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Active class participation	10	written exam	
Practical work	20	oral exam	50

Preliminary exam(s)	20	…….	
Seminar(s)			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			