Study Programme: Agronomy

Course Unit Title: Diagnostics of plant pathogenic viruses

Course Unit Code: 19.AGR139

Name of Lecturer(s): Dr Dragana Budakov, dr Renata Iličić

Type and Level of Studies: Doctoral Academic Studies

Course Status (compulsory/elective): elective

Semester (winter/summer): winter/summer

Language of instruction: English

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

Number of ECTS Allocated: 10

Prerequisites: Methods of Scientific Work (Scientific Research Methods)

Course Aims: Mastering diagnostic techniques for phytopathogenic viruses aimed at detection, control measures, and reduction of economic losses.

Learning Outcomes:
Ability to independently detect and diagnose phytopathogenic viruses.

Syllabus:

Theory- Hosts of phytopathogenic viruses, serological identification techniques, purification of phytopathogenic viruses, electrophoresis, nucleic acid isolation, RT-PCR, PCR. Other molecular techniques for the identification of plant viruses.

Study research work Diagnostic test plants, herbaceous and woody test plants, cellular inclusions, modes of transmission, biophysical properties, electron microscopy, molecular identification techniques.

Required Reading:
George N. Agrios (2005): Plant pathology. 5th edition. Elsevir Academic Press.
Bagi, F., Jasnić, S., Budakov, D. (2016): Plant Viruses. University of Novi Sad, Faculty of Agriculture-in Serbian.
Strange, R.N. (2003): Introduction to Plant Pathology. John Wiley & Sons Ltd.
Dijskra, J., de Jager, C. (1998): Practical Plant Virology: Protocols and Exercises. Springer Verlag

Weekly Contact Hours:	**Lectures: 4**	**Study Research Work: 6**

Teaching Methods: Interactive teaching, consultations, practical work and demonstrations, research and review paper writing and commenting.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Seminar(s)	40	written exam	60
Practical work		oral exam	
Preliminary exam(s)		…….	

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.