

## PHYTOPATHOLOGY (II nd Year of study, SEMESTER I and II)

Credit value (ECTS) Sem. I=4, Sem. II=4

### Course category

Domain (Imposed)

### Course holder:

Prof. dr. Eugen ULEA

### Discipline objectives (course and practical works)

The analytical program aims to instill the knowledge by students concerning etiology, symptomatology, the epidemiology and measures for prevention and control of plant disease. Practical application aims to familiarize students

### Contents (syllabus)

Course (chapters/subchapters)
<b>Semester I</b>
Phytopathology as a science.
General notions about plant diseases
Infectious phytopathogenic agents overview
Phytopathogenic agents
Infectious diseases pathogenesis
Epidemiology of parasitic diseases
Preventing and combating plant diseases
Measures to prevent the intoxications and pollution in plant protection
Phytopathology as a science.
<b>Semester II</b>
Vegetable Diseases
Crucifer and umbellifer diseases
Fruit trees diseases
Grapevine diseases
Diseases of root and tuber crops
Diseases of cereal, pea and bean crops
Ornamental plant Diseases
<b>Practical works</b>
<b>Semester I</b>
Parasitic aspects- anatomical and morphological changes produced by viruses, mycoplasma, bacteria and pathogenic fungi
Phytopathological material harvest
Micromycetes morphology
Vegetative reproduction and asexual reproduction of micromycetes. Sexual reproduction: oospore, zygospore, ascus.
Sexual reproduction: basidium
Prevention and control of diseases caused by pathogens in plants
Peas and beans diseases
Potato diseases: viruses, bacteriosis, mycosis
Sugar -beet diseases
Fodder plant diseases
<b>Practical works</b>
<b>Semester II</b>

Vegetables diseases
Apple, pear and quince trees diseases
Plum, cherry, apricot and peach diseases
Grapevine diseases
Diseases of root and tuber crops
Diseases of cereal, pea and bean crops
Ornamental plant diseases

### **Bibliography**

1. Iacob Viorica, Hatman M., Ulea, E., Puiu I., 1999 – Fitopatologie generală, Ed. Căntes, Iași.
2. Iacob Viorica, 2003 - Fitopatologie Ed. Ion Ionescu de la Brad Iași.
3. Ulea, E., 2003 – *Fitopatologie horticolă*, Ed. Ion Ionescu de la Brad Iași.
4. Hatman M. și colab.: *Protecția plantelor*. Ed. CERES, București, 1986.
5. Henegar Monica, Andru Monica, *Codexul produselor de protecție a plantelor omologate pentru utilizare în România*, Ed. Andagra, Arad, 2013
6. Iacob Viorica: *Bolile plantelor cultivate-prevenire și combatere*, Ed. "Ion Ionescu de la Brad", Iași, 2008
7. Rădulescu E., Rafail C.: *Tratat de fitopatologie agricolă*, vol. II, Ed. Academiei Republicii Socialiste România, București 1970
8. Agrios George, 2005 – Plant pathology, Ed. Elsevier Academic Press

### **Evaluation**

<b>Evaluation form</b>	<b>Evaluation Methods</b>	<b>Percentage of the final grade</b>
Exam	Oral examination	60%
Appreciation of the activity during the semester	Test+ practical application+ herbarium	40%

### **Contact**

**Prof. Dr. Eugen ULEA**

Faculty of Agriculture - USAMV Iasi

Al. Mihail Sadoveanu nr. 3, Iasi, 700490, Romania

Tel.: 0040 232 407426, fax: 0040 232 219175

E-mail: [uleae@yahoo.com](mailto:uleae@yahoo.com)