

COURSE: Plant Pathology

ACADEMIC YEAR: 2016-2017

TYPE OF EDUCATIONAL ACTIVITY: Characteristic

TEACHER: Ippolito Camele

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mobile (optional):

Language: Italian

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|--------------------------------------------------------------|------------------------------------------------------|---------------------------------------------|-------------|
| ECTS 9 CFU (8 of lessons and 1 of laboratory/practice) | n. of hours: (lessons e tutorials/practice) 80 | Campus: Potenza School: SAFE Program: | Semester: I |
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EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

Students will learn the basic knowledge of general and special Plant pathology and will be able to diagnose the most important plant diseases caused by fungi, bacteria, viruses, viroids and phytoplasmas and give the farmers useful directions to control plant diseases ensuring environmental and human healthy

PRE-REQUIREMENTS

Students wishing to access this teaching is advised to have a good knowledge in the plant physiology and biochemistry.

SYLLABUS

In the general part, after brief remarks on the history of Plant Pathology, in particular, the following topics will be addressed: general and subdivision of the course -The economic importance of plant diseases -The concept of disease and injury - Study of a plant disease: symptoms, etiology, Koch's postulates – The general characteristics of fungi, bacteria, viruses, viroids and phytoplasma – Pathogenicity and virulence - Susceptibility and resistance - Degree of parasitism - Phases of the infectious process - Plant defense mechanisms - Principles of struggle against plant pathogens - Biological control concepts, guided and integrated - Diagnostic techniques in Plant Pathology. Mycotoxins. In the second part of the course the main diseases of parasitic nature of cultivated plants and major postharvest disease of plant products will be treated. Essential concepts of bioinformatics will be addressed. During the practical lessons the students will approach both classical and molecular diagnostic techniques for plant pathogens detection.

TEACHING METHODS

Theoretical lessons, Laboratory tutorials. The topics of the course will be treated with the help of Power Point presentations.

EVALUATION METHODS

Oral examination. Generally the student examined three questions will be posed, two on general pathology topics and one on special pathology. The answers to the questions will provide the inspiration for requests for clarification and / or further details and will allow to probe the student of much of the program done.

The oral test will last approximately thirty minutes. written tests will be possible. In this case the final evaluation of the oral test will be the average of the votes obtained in the written tests and the vote obtained in the oral test.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

Elementi di Patologia Vegetale, Piccin Editore, di Giuseppe Belli e Collaboratori;

Fondamenti di Patologia Vegetale, Ed. Patron, di A. Matta;

Fondamenti di Patologia Vegetale, Ed. Patron, di A. Matta; Patologia Postraccolta dei Prodotti Vegetali, di V. De Cicco et al., Piccin Editore;

For watching additional photographic material from the one shown in class or for further information will be provided internet sites addresses.



Lesson notes.

INTERACTION WITH STUDENTS

At the beginning of the course, after describing the objectives, program and methods of verification, the teacher collects the list of students accompanied by name and email.

The teacher receives from Monday to Friday from 9.00 to 11.00 and he is available at all times for a contact with the students, through its e-mail or telephone.

EXAMINATION SESSIONS (FORECAST)¹

06/09/2016, 21/10/2016, 18/11/2016, 16/12/2016, 20/01/2017, 10/02/2017, 24/03/2017, 21/04/2017

Riportare le date inserite nella scheda in lingua italiana

EVALUATION BOARD

Riportare la commissione inserita nella scheda in lingua italiana

SEMINARS BY EXTERNAL EXPERTS YES NO

FURTHER INFORMATION

Examining board: Ippolito Camele; Maria Nuzzaci

¹ Subject to possible changes: check the web site of the Teacher or the Department/School for updates.