



UNIVERSITÀ DEGLI STUDI DELLA BASILICATA

SAFE - SCUOLA DI SCIENZE AGRARIE, FORESTALI, ALIMENTARI ED AMBIENTALI

ACADEMIC YEAR: **2016-2017**

COURSE: **Applied Plant Pathology (module of Integrated Pest Management)**

TYPE OF EDUCATIONAL ACTIVITY: **Characterizing**

TEACHER: **Prof. Aniello Crescenzi**

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Language: **Italian**

ECTS 6 (5 lessons and 1 tutorials /practice)	N. hours: 56 (40 lessons and 16 tutorials/practice)	Campus: Potenza School: Safe Program: Scienze e Tecnologie Agrarie	Semester: I & II
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EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

Key Topics: Biology, characteristics of the main plant pathogens (viroids, viruses, phytoplasma, bacteria, fungi, parasitic plants) of economic interest for agricultural crops, eco-epidemiological cycles of pathogens, damage they cause, method detection, diagnosis, prevention and integrated control in a modern agricultural system, respecting the environment and the health of agricultural products.

At the end of the course, students should be able to:

- Identify and diagnose major diseases of fruit and horticultural plants and the damage they cause.
- plan, manage and analyze the plans of defense and disease prevention.

PRE-REQUIREMENTS

Previous attending of the courses of General Plant Pathology, Botany, Agronomy, Biochemistry, Biology, Cultivation is strongly suggested.

SYLLABUS

Part 1 (12 hours)

Advanced knowledge of viroids, viruses, phytoplasma, bacteria, plant pathogenic fungi and parasitic plants, transmission mechanisms, methods of diagnosis, key prevention and integrated control of agricultural plant diseases

Part 2 (20 hours)

Planing of integrated defense systems of the major agro-systems of woody plants

Part 3 (20 hours)

Planing of integrated defense systems of the major agro-systems of herbaceous plants

TEACHING METHODS

The course includes 56 hours of didactic between lessons and practice.

In particular 40 hours of lectures and 12 hours of practice are foreseen (Guidance for the preparation of a plant pathology herbarium, laboratory activities, field trips, visits to the plant disease diagnosis centers, test facilities and participation in conferences and specialized meetings).

EVALUATION METHODS

The aim of the examination is to test the level of achievement of the previously mentioned educational goals. The course is annual and consists of two six-month modules. During the break between the first and the second module there is a written mid-term exam (with open and closed questions) on the topics covered in the first module, in order to assess the acquired knowledge and understanding of the basic arguments. This mid-term test corresponds to 40% of the overall evaluation of teaching. At the end of the course a final oral test will assess the ability to link and compare the various aspects addressed. The preparation of a herbal plant pathology from the student is an integral part of the final exam: the herbarium will collect no less than thirty plant disease samples of the leading agro-treated.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL



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- Crescenzi e G. D'Agrosa. *Difesa integrata del pomodoro*. Il Sole 24 Ore Edagricole
 - Crescenzi et. Al . *Le avversità delle Brassicacee*. AssoSementi
 - G. Belli *Elementi di Patologia vegetale*. Piccin editore;
 - L. Giunchedi, D. Gallitelli, M. Conti, G.P. Martelli. *Elementi di Virologia Vegetale*. Piccin editore;
 - L. Giunchedi. *Malattie da virus, viroidi e fitoplasmi degli alberi da frutto*. Edagricole
 - M. Conti, Gallitelli D., Lisa V., Lovisolo O., Martelli G.P. Ragozzino A., Rana G.L. e Vovlas. *I principali virus delle piante ortive*. Bayer
 - N. Agrios. *Plant Pathology*. Academic Press.
 - R.T.V. Fox. *Principles of diagnostic techniques in plant pathology*. CAB International
 - Giacomo Lorenzini – Principi di fitoiatria. Edagricole

Other educational material will be given to the students during the course

INTERACTION WITH STUDENTS

At the beginning of the course, after describing the objectives, program and test procedures, the teacher collects the list of students attending the course with your full name, serial number and email. The mailing list thus generated will allow the teacher to quickly notify students with information, news, educational material and periodic self-test. educational materials will be distributed and commented during class or by email.

Visiting hours: every day from 8,30 to 9,30 a.m., in the teacher's office, room 3A310. The previous office hours scheme may not obviously predict setbacks or meeting suddenly convened. Moreover, every student can ask to be received even in times not included in the previous scheme with a mail addressed to aniello.crescenzi@unibas.it or through sms or whatsapp to the phone number +39-3204371243.

EXAMINATION SESSIONS (FORECAST)¹

The exact dates for the exam sessions can be found at the following link (sorry, at the present time, only in italian): <https://unibas.esse3.cineca.it/ListaAppelliOfferta.do;jsessionid=> Please note that the final exam is for both the modules of the course so in order to find the exam session check out the link for "Difesa Integrata"

SEMINARS BY EXTERNAL EXPERTS YES NO

FURTHER INFORMATION

None

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