



FACULTY OF AGRICULTURAL, FOOD AND ENVIRONMENTAL SCIENCES – COURSE IN
▪ SUSTAINABLE VITICULTURE AND ENOLOGY

INTRODUCTORY COURSES IN VITICULTURE (APPLIED GRAPEVINE ECOPHYSIOLOGY), ENOLOGY (ADVANCES IN ENOLOGY) AND CROP PROTECTION (DISEASE AND PEST MANAGEMENT)

The Faculty of Agricultural, Food and Environmental Sciences invites 2024/25 first year students to the introductory courses in VITICULTURE, ENOLOGY and CROP PROTECTION:

1. to integrate and to consolidate basic knowledge which is a prerequisite of the main courses
2. to complete knowledge of and revise those topics that are prerequisites for the main courses.

▪ **INTRODUCTORY COURSES: TIMETABLE**

The lessons will begin on **Monday 09th September 2024** in **room 4** as follows:

Day	Date	Time	Subject
Monday	09th September 2024	14.30-16.30	ENOLOGY
Tuesday	10th September 2024	10.30-12.30 14.30-16.30	VITICULTURE ENOLOGY
Wednesday	11th September 2024	08.30-11.30 11.30-13.30	VITICULTURE ENOLOGY
Thursday	12th September 2024	08.30-10.30 10.30-12.30 13.30-15.30	VITICULTURE CROP PROTECTION ENOLOGY
Friday	13th September 2024	08.30-10.30 10.30-12.30 13.30-15.30	CROP PROTECTION VITICULTURE ENOLOGY
Monday	16th September 2024	08.30-11.30 11.30-13.30 14.30-17.30	VITICULTURE ENOLOGY CROP PROTECTION
Tuesday	17th September 2024	08.30-11.30 11.30-13.30 14.30-16.30	VITICULTURE CROP PROTECTION ENOLOGY



Day	Date	Time	Subject
Wednesday	18th September 2024	08.30-11.30 11.30-13.30 14.30-17.30	VITICULTURE ENOLOGY CROP PROTECTION
Thursday	19th September 2024	08.30-11.30 11.30-13.30	CROP PROTECTION ENOLOGY
Friday	20th September 2024	10.30-13.30	CROP PROTECTION



■ **INTRODUCTORY COURSE OF Viticulture**

LECTURER

Prof. Stefano Poni

SYLLABUS

- 1 – A few numbers on winegrapes growing and market trends. Origin and taxonomy of *Vitis* spp. Anatomy, origin and functions of roots and canopies. Phenology and growth cycle. Reproductive cycle: bud differentiation, blooming, fruit-set, veraison and ripening. The concept of bud fruitfulness.
- 2 - Grapevine physiology: factors affecting plant growth, gas-exchange, water relations and leaf-to-fruit balance. Emphasis on photosynthesis, transpiration and respiration.
- 3 – Berry development and ripening: physiological and biochemical patterns.

■ **INTRODUCTORY COURSE OF Enology**

LECTURER

Dott.ssa Milena Lambri

SYLLABUS

1. **Wine Chemistry:** grape and wine composition in terms of sugars, acids, phenolics, aminoacids, proteins, and enzymes.
2. **Wine Microbiology:** fundamentals of alcoholic fermentation and malolactic fermentation, with issues about the main indigenous and selected microorganisms.
3. **Winemaking and wine styles:** fundamentals of production of white, red, and sparkling wines.

Suggested (not mandatory) book

Andrew L. Waterhouse, Gavin L. Sacks, David W. Jeffery, *Understanding Wine Chemistry*
John Wiley & Sons Inc., 2016.



■ **INTRODUCTORY COURSE OF Crop Protection**

LECTURER

Dott.ssa Irene Salotti

SYLLABUS

1. **Background information about importance of plant diseases. Myth, history and science: why study plant pathology?**
2. **Causal agents of disease (bacteria, viruses, fungi, phytoplasmas and viroids); Koch's postulates and main diagnosis methods; the disease cycle, infection process and the infection cycle.**
3. **Description of the main grapevine diseases: symptoms, biology, diagnosis, life cycle, epidemiology and yield losses. Introduction to disease control.**

Suggested (not mandatory) book

Plant Pathology, 5th Edition - G. Agrios

Compendium of Grape Diseases, Disorders and Pests, 2nd Edition – APS Press



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POLO STUDENTI DI PIACENZA
Immatricolazioni a.a. 2024/25