COURSE DETAILS
LABORATORY OF WINE ANALYSIS
SSD AGR15*

* *In case of an integrated course, the SSD (scientific disciplinary sector) should be written above only if all modules of the course belong to the same SSD, otherwise the SSD is to be written alongside the MODULE (see below).*

DEGREE PROGRAMME: VITICULTURE AND ENOLOGY

ACADEMIC YEAR 2021 -2022

GENERAL INFORMATION – TEACHER REFERENCES

TEACHER: ANGELITA GAMBUTI
PHONE: 081 2532605
EMAIL: ANGELITA.GAMBUTI@UNINA.IT

GENERAL INFORMATION ABOUT THE COURSE

YEAR OF THE DEGREE PROGRAMME (I, II, III): I
SEMESTER (I, II): II
CFU: 6

REQUIRED PRELIMINARY COURSES (IF MENTIONED IN THE COURSE STRUCTURE "ORDINAMENTO") PREREQUISITES (IF APPLICABLE)

LEARNING GOALS

The learning goals are to provide all the knowledge related to basic analytical chemistry and the analytical methods used to carry out the main analyzes of grapes and wine. The course provides all the skills related to the basic analysis of grapes and wine necessary for their processing and marketing. The course consists of 50% of practical laboratory activities. The goal is to allow the student to get familiar with common laboratory tests and explore the limitations of each type of analysis.

EXPECTED LEARNING OUTCOMES (DUBLIN DESCRIPTORS)

Knowledge and understanding

The student must demonstrate knowledge and understanding of the problems related to the chemical-physical analyses of grapes and wine with the aim to evaluate their quality and allow them to be marketed. The student will be able to make analyses in the laboratory and he will know the limits of each analytical method.

Applying knowledge and understanding

The student must be able to independently apply the analytical methods necessary for winemaking process control and to critically evaluate any actions to be taken into the laboratory to obtain the most accurate and precise analytical result possible.

COURSE CONTENT/SYLLABUS

basic principles of analytical chemistry and laboratory practice (1 CFU);
physical and chemical methods for the dosage of sugars and turbidity (1 CFU),
analyses of pH, titratable acidity, volatile acidity (1 CFU),
analyses of alcohol content, dry extract, ash (1 CFU),
analyses of SO2 free and total (1 CFU),
analyses of total polyphenols, chromatic characteristics and malic acid by enzymatic methods through the use of UV-Vis spectrophotometry (1 CFU).

READINGS/BIBLIOGRAPHY

Ribereau-Gayon P., Glories Y., Maujean A., Dubourdieu D. Trattato di enologia. 2003. Ed. Ed agricole. Luciano Usseglio Tomasset. Chimica Enologica. 1996. Ed. AEB Brescia. Metodi Ufficiali di Analisi. www.oiv.int. Waterhouse, A., Sacks, G., & Jeffery, D. (2016). Understanding Wine Chemistry. John Wiley & Sons.

TEACHING METHODS

"Teacher will use: a) lectures for approx..50 % of total hours; b) laboratories to further elaborate on applied knowledge for approx..50 % of total hours or CFU.

EXAMINATION/EVALUATION CRITERIA

a) Exam type:

Exam type	
written and oral	
only written	
only oral	x
project discussion	
other	