

**1. General information****Course:** ENOLOGY I**Type:** CORE COURSE**Degree:** 400 - UNDERGRADUATE DEGREE PROGRAMME IN OENOLOGY**Center:** 107 - E.T.S. OF AGRICULTURAL ENGINEERS OF C. REAL**Year:** 3**Main language:** Spanish**Use of additional languages:****Web site:****Code:** 58520**ECTS credits:** 6**Academic year:** 2023-24**Group(s):** 20**Duration:** First semester**Second language:****English Friendly:** Y**Bilingual:** N**Lecturer:** BERNARDO ORTEGA SARVISÉ - Group(s): 20

Building/Office	Department	Phone number	Email	Office hours
San Isidro Labrador	Q. ANALÍTICA Y TGIA. ALIMENTOS		Bernardo.Ortega@uclm.es	Wednesday, thursday and friday from 9:00 to 11:00 am.

**Lecturer:** JOSÉ PÉREZ NAVARRO - Group(s): 20

Building/Office	Department	Phone number	Email	Office hours
San Isidro Labrador/302	Q. ANALÍTICA Y TGIA. ALIMENTOS		Jose.PNavarro@uclm.es	Tuesday, wednesday and thursday from 9:00 to 11:00 am.

**2. Pre-Requisites**

Knowledge of Oenological Chemistry, Basic Operations and Oenological Technology is required.

**3. Justification in the curriculum, relation to other subjects and to the profession**

This subject includes essential content for the student to achieve the skills established in the Degree in Oenology, from the raw material to the obtaining a quality wine, going through the different stages of its elaboration.

**4. Degree competences achieved in this course****Course competences**

Code	Description
CB02	Apply their knowledge to their job or vocation in a professional manner and show that they have the competences to construct and justify arguments and solve problems within their subject area.
CB04	Transmit information, ideas, problems and solutions for both specialist and non-specialist audiences.
CE06	Ability to manage the obtaining of musts for winemaking and conservation, the control of the fermentation of all types of wines, their aging, and the packaging, bottling and storage of wine and derived products according to legal, hygienic and environmental provisions.
CE07	Manage and supervise the reception and control of raw materials, the winery work: cleaning, racking, conservation, clarification, filtration, stabilization and conservation of wines, applying the knowledge acquired on the composition of grapes and wine and its evolution.
CE08	Ability to carry out or supervise routine or specific analytical, microbiological and sensory control in the vineyard and winery and apply it to the control of raw materials, enological products, intermediate products and final products throughout the entire production process.
CG01	Develop motivation for quality, the ability to adapt to new situations and creativity.
CG02	Manage complex technical or professional projects. Solve complex problems effectively in the field of Enology.
CG04	Work autonomously with responsibility and initiative, as well as in teams in a collaborative way and with shared responsibility.
CT03	Use correct oral and written communication.
CT04	Know the ethical commitment and professional deontology.

**5. Objectives or Learning Outcomes****Course learning outcomes****Description**

To train the student to manage, organize and control winemaking processes depending on the type of product to be made and the quality of the raw material.

To know the different winemaking methodologies to obtain different types of wines and products derived from grapes and by-products, as well as the machinery and materials needed in each case.

To demonstrate theoretical and practical knowledge of the analytical and sensory control methods used in the winery during the production, stabilization and bottling of wines.

To acquire knowledge to direct, organize and control the production and harvesting of grapes according to the type of wine to be made.

To be able to analyze situations and problems in the winery and decide the most appropriate treatments and alternatives at all times.

To be able to design and carry out experimentation works in the winery.

**6. Units / Contents****Unit 1: Grape harvest: maturity, transport and reception.**

Unit 2: Grape processing.  
Unit 3: Red winemaking.  
Unit 4: White winemaking.  
Unit 5: Rosé winemaking.  
Unit 6: Production of sparkling and carbonated wines.  
Unit 7: Elaboration of generous wines.  
Unit 8: Innovations in winemaking processes.

#### 7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Class Attendance (theory) [ON-SITE]	Lectures	CE06 CE07 CE08 CG01 CT04	1.28	32	N	-	Lecture and guided discussion of theoretical content and problem solving. The teaching material will be available on the Virtual Campus. Student participation in the classes will be encouraged.
Class Attendance (practical) [ON-SITE]	Practical or hands-on activities	CB02 CE06 CE07 CE08 CG01 CG02 CG04	0.6	15	Y	Y	Guided practice in the laboratory. The knowledge and abilities acquired during this training activity will be assessed by means of a questionnaire.
Problem solving and/or case studies [ON-SITE]	Guided or supervised work	CB02 CB04 CE06 CE07 CE08 CG01 CG02 CT03	0.24	6	Y	N	Work tutored on the resolution of problems and exercises of the units.
Group tutoring sessions [ON-SITE]	Guided or supervised work	CB02 CB04 CG01 CT03	0.16	4	N	-	Group tutoring.
Writing of reports or projects [OFF-SITE]	Self-study	CB02 CB04 CG01 CG04 CT03	0.64	16	Y	Y	Elaboration of a practical report where the work carried out in the laboratory is reported and the results obtained are discussed. This training activity will be compulsory for all students regardless of whether they have done the practical work in the laboratory or not.
Study and Exam Preparation [OFF-SITE]	Self-study	CG04	2.96	74	N	-	Independent and autonomous work of the student.
Final test [ON-SITE]	Assessment tests	CB02 CB04 CE06 CE07 CE08 CG02 CT03 CT04	0.12	3	Y	Y	In the case of continuous assessment, mid-term tests will be carried out which may partially or totally replace the written test performed in the final exam. For non-continuous evaluation, the knowledge acquired by the student during the course will be evaluated by means of a written test in official exams.
<b>Total:</b>			<b>6</b>	<b>150</b>			
<b>Total credits of in-class work: 2.4</b>			<b>Total class time hours: 60</b>				
<b>Total credits of out of class work: 3.6</b>			<b>Total hours of out of class work: 90</b>				

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

#### 8. Evaluation criteria and Grading System

Evaluation System	Continuous assessment	Non-continuous evaluation*	Description
Laboratory sessions	10.00%	10.00%	Evaluation of the knowledge and skills acquired in the laboratory by means of a questionnaire.
Assessment of problem solving and/or case studies	10.00%	10.00%	Resolution of problems or practical cases which will be assigned by the teacher.
Mid-term tests	70.00%	0.00%	The knowledge of the subject will be evaluated through mid-term tests in continuous assessment.
Practicum and practical activities reports assessment	10.00%	10.00%	Preparation of a practical report on the work carried out in the laboratory and a discussion of the results in a clear and precise manner.
Final test	0.00%	70.00%	Written test consisting of evaluating the knowledge acquired by the students during the course.
<b>Total:</b>	<b>100.00%</b>	<b>100.00%</b>	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject, an ordinary and an extraordinary one (evaluating 100% of the competences).

Evaluation criteria for the final exam:

Continuous assessment:

For continuous assessment, the completion and delivery of all assessable and compulsory training activities will be proposed within a reasonable period of time and sufficiently separated from each other, which will be set by the lecturer. During the course, mid-term tests will be carried out which may partially or totally replace the written test performed in the final exam. The mark required for each of the assessable and compulsory training activities must reach a minimum of 40% of the grade for that activity. In order to pass the subject, a minimum mark of 5 points out of 10 will be required, after applying the percentages corresponding to each of the evaluable training activities.

#### Non-continuous evaluation:

Any student with difficulties in following the proposed development of the subject may change to the non-continuous assessment modality provided that the student has not participated during the period of classes in assessable activities that together account for at least 50% of the total assessment of the subject. In this case, it will be an essential requirement to deliver the compulsory and assessable training activities before taking the written test in the final exam. The knowledge acquired by the student during the course will be evaluated by means of a written test in official exams. The mark required in each of the compulsory and assessable training activities must reach a minimum of 40% of the grade for that activity. In order to pass the course, a minimum mark of 5 points out of 10 will be required, after applying the percentages corresponding to each of the assessable training activities.

#### Specifications for the resit/retake exam:

A final test will be carried out to assess all the competences to be acquired by the student, with theoretical and practical contents of the subject, regardless of whether a mid-term test has been passed. For the rest of the assessable and compulsory activities in which the student has obtained a minimum score of 40% of the grade, they will not be re-evaluated in the resit/retake exam, maintaining the grade of each activity. In order to pass the subject, a minimum score of 5 point out of 10 will be required, after applying the percentages corresponding to each of the evaluable training activities.

#### Specifications for the second resit / retake exam:

A final test will be held in which all the competences to be acquired by the student will be assessed, with both theoretical and practical contents of the subject, including all the assessable activities.

9. Assignments, course calendar and important dates	
Not related to the syllabus/contents	
Hours	hours
Class Attendance (theory) [PRESENCIAL][Lectures]	32
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	15
Problem solving and/or case studies [PRESENCIAL][Guided or supervised work]	6
Group tutoring sessions [PRESENCIAL][Guided or supervised work]	4
Writing of reports or projects [AUTÓNOMA][Self-study]	16
Study and Exam Preparation [AUTÓNOMA][Self-study]	74
Final test [PRESENCIAL][Assessment tests]	3
Global activity	
Activities	hours
Writing of reports or projects [AUTÓNOMA][Self-study]	16
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	15
Group tutoring sessions [PRESENCIAL][Guided or supervised work]	4
Problem solving and/or case studies [PRESENCIAL][Guided or supervised work]	6
Final test [PRESENCIAL][Assessment tests]	3
Class Attendance (theory) [PRESENCIAL][Lectures]	32
Study and Exam Preparation [AUTÓNOMA][Self-study]	74
<b>Total horas: 150</b>	

10. Bibliography and Sources						
Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Zoecklein, B.W. et al.	Análisis y producción de vinos	Acribia		978-84-200-0936-0	2001	
Flanzy, Claude	La vinificación por maceración carbónica	A. Madrid Vicente		2-85340-970-8	1990	
Blouin, Jacques	Enología práctica: conocimiento y elaboración del vino	Mundi-Prensa		84-8476-160-6	2006	
Blouin, Jacques	Maduración y madurez de la uva	Mundi-Prensa		84-8476-159-2	2004	
Flanzy, Claude	Enología: Fundamentos científicos y tecnológicos	Mundi-Prensa		2-7430-0243-3	2002	
Rankine, Bryce	Manual práctico de Enología	Acribia		84-200-0893-1	1999	
Hidalgo Togores, José	Tratado de Enología	Mundi-Prensa		978-84-8476-752-7	2018	
Peynaud, Émile	Enología práctica: conocimiento y elaboración del vino	Mundi-Prensa		84-7114-214-7	1989	
Ribereau-Gayón, P. et al.	Handbook of Enology. Volume 1. The microbiology of wines and vinifications.	Wiley		0-471-97362-9	2000	