UNIVERSIDAD DE CASTILLA - LA MANCHA

GUÍA DOCENTE

1. General information

Course: PHYSICS
Code: 58502
Type: BASIC
ECTS credits: 6
Degree: 400 - UNDERGRADUATE DEGREE PROGRAMME IN OENOLOGY
Academic year: 2023-24
Center: 107 - E.T.S. OF AGRICULTURAL ENGINEERS OF C. REAL
Group(s): 20
Year: 1
Duration: First semester
Main language: Spanish
Second language: English
Use of additional languages:
English Friendly: Y
Web site:
Bilingual: N

Lecturer: **JOSE ANGEL DE TORO SANCHEZ** - Group(s): **20**

Building/Office	Department	Phone number	Email	Office hours
ETSI Agrónomos / 0.1	FÍSICA APLICADA	3790	joseangel.toro@uclm.es	

2. Pre-Requisites

Not established

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

Not established

4. Degree competences achieved in this course

Course competences

Code	Description
CB01	Prove that they have acquired and understood knowledge in a subject area that derives from general secondary education and is appropriate to a level based on advanced course books, and includes updated and cutting-edge aspects of their field of knowledge.
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.
CB05	Have developed the necessary learning abilities to carry on studying autonomously
CE01	Apply basic knowledge of mathematics, physics, chemistry and biology to enology.
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.
CG04	Work autonomously with responsibility and initiative, as well as in teams in a collaborative way and with shared responsibility.
CT02	Know and apply Information and Communication Technologies (ICT).
CT03	Use correct oral and written communication.

5. Objectives or Learning Outcomes

Course learning outcomes

Description

Handle the basic physical magnitudes necessary to face the concepts of mathematics, chemistry and biology that will appear throughout the degree, being able to establish relationships between the different concepts.

Master the basic scientific terminology, as well as the use of units and their conversions.

Familiarization with laboratory work: learning to take experimental measurements controlling the sources of error, quantifying the extent of these and expressing the result correctly.

Search and select information in the field of Physics, process and present it properly both orally and in writing, developing the ability to synthesize, being critical and objective.

Use data analysis software to prepare professional presentations of experimental results.

6. Units / Contents

Unit 1:
Unit 2:
Unit 3:
Unit 4:

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Writing of reports or projects [OFF-SITE]	Self-study	CB01 CB02 CB05 CE01 CE08 CG01 CG04 CT02 CT03	0.64	16	Y	N	Elaboration of group or personal reports or problem solving for its subsequent grading

Class Attendance (theory) [ON-SITE]	Lectures	CB01 CB02 CB05 CE01 CE08 CG01 CG04 CT02 CT03	1.28	32	Y	N	Oral presentation of the theoretical part of the course.
Group tutoring sessions [ON-SITE]	Group tutoring sessions	CB01 CB02 CB05 CE01 CE08 CG01 CG04 CT02 CT03	0.16	4	Y	N	Tutoring and discussion of students' reports/exercises
Class Attendance (practical) [ON-SITE]	Practical or hands-on activities	CB01 CB02 CB05 CE01 CE08 CG01 CG04 CT02 CT03	0.6	15	Y	Y	The evaluation section describes the realization of lab practicals and how to pass them
Study and Exam Preparation [OFF-SITE]	Combination of methods	CB01 CB02 CB05 CE01 CE08 CG01 CG04 CT02 CT03	2.96	74	N	-	Student's personal work to prepare tests
Workshops or seminars [ON-SITE]	Problem solving and exercises	CB01 CB02 CB05 CE01 CE08 CG01 CG04 CT02 CT03	0.24	6	Y	N	Problem solving proposed for the group
Mid-term test [ON-SITE]	Assessment tests	CB01 CB02 CE01	0.12	3	Y	N	Problem-based written test
		Total:	**6**	**150**			
		Total credits of in-class work: 2.4					**Total class time hours: 60**
		Total credits of out of class work: 3.6					**Total hours of out of class work: 90**

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
Mid-term tests	70.00%	0.00%	Two mid-terms exams: one in the middle of the quarter, another one included in the final exam.
Laboratory sessions	15.00%	15.00%	The realization of the lab experiments and the elaboration of the corresponding report are required to pass the course. If the student fails (score below 4), the student will have to do an additional lab exam in the extraordinary call (June exam)
Assessment of problem solving and/or case studies	15.00%	0.00%	Problems to be handed in by the students and solved in the classroom
Final test	0.00%	85.00%	Final exam for non-continuous evaluation
Total:	**100.00%**	**100.00%**	

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:

The final exam will consist of two parts corresponding to the two midterm exams. Those students with the first midterm with a grade equal or higher than 4 can take if they wish only the second part of the exam. If the grade of the final exam or the average of the midterm and the laboratory grades are both equal or higher than 4, the final grade of the course will be determined based on the percentages of the table above (70%exam + 15%laboratory + 15%participation), otherwise the score will be that of the final exam.

Non-continuous evaluation:

In this modality the evaluation will be carried out exclusively with the final exam programmed by the School, which will include a laboratory part for those students who have not passed the lab in the last two years.

Specifications for the resit/retake exam:

The evaluation will be carried out exclusively with the extraordinary exam programmed by the School, which will include a laboratory part for those students who have not passed the practicals.

Specifications for the second resit / retake exam:

The evaluation will be carried out exclusively with the exam programmed by the School for this purpose, which will include a laboratory part for those students who have not passed the practicals.

9. Assignments, course calendar and important dates

Not related to the syllabus/contents

Hours	**hours**
Unit 1 (de 4):	
Activities	**Hours**
Workshops or seminars [PRESENCIAL][Problem solving and exercises]	1
Writing of reports or projects [AUTÓNOMA][Self-study]	4
Class Attendance (theory) [PRESENCIAL][Lectures]	6
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	12
Mid-term test [PRESENCIAL][Assessment tests]	1
Group 20:	
Initial date: 18-09-2023	**End date:** 30-09-2022
Unit 2 (de 4):	
Activities	**Hours**
Workshops or seminars [PRESENCIAL][Problem solving and exercises]	2
Writing of reports or projects [AUTÓNOMA][Self-study]	4

Class Attendance (theory) [PRESENCIAL][Lectures]	10
Group tutoring sessions [PRESENCIAL][Group tutoring sessions]	2
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	5
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	25
Mid-term test [PRESENCIAL][Assessment tests]	1
Group 20:	
Initial date: 03-10-2022	**End date:** 31-10-2022
Unit 3 (de 4):	
Activities	**Hours**
Workshops or seminars [PRESENCIAL][Problem solving and exercises]	2
Writing of reports or projects [AUTÓNOMA][Self-study]	4
Class Attendance (theory) [PRESENCIAL][Lectures]	10
Group tutoring sessions [PRESENCIAL][Group tutoring sessions]	2
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	5
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	25
Mid-term test [PRESENCIAL][Assessment tests]	1
Group 20:	
Initial date: 01-11-2022	**End date:** 09-12-2022
Unit 4 (de 4):	
Activities	**Hours**
Workshops or seminars [PRESENCIAL][Problem solving and exercises]	1
Writing of reports or projects [AUTÓNOMA][Self-study]	4
Class Attendance (theory) [PRESENCIAL][Lectures]	6
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	5
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	12
Group 20:	
Initial date: 12-12-2022	**End date:** 22-12-2022
Global activity	
Activities	**hours**
Writing of reports or projects [AUTÓNOMA][Self-study]	16
Class Attendance (theory) [PRESENCIAL][Lectures]	32
Group tutoring sessions [PRESENCIAL][Group tutoring sessions]	4
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	15
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	74
Mid-term test [PRESENCIAL][Assessment tests]	3
Workshops or seminars [PRESENCIAL][Problem solving and exercises]	6
Total horas:	150

10. Bibliography and Sources

Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Serway y Vuille	Fundamentos de Física	Cengage			2018	Libro principal (excepto para tema 4, corriente eléctrica)
Serway, Raymond A.	Física para Ciencias e Ingeniería	International Thomson		970-686-423-7 (v.1)	2005	
Franco, Ángel	Física con ordenador					Curso interactivo de Física
Gettys, W. Edward	Física para Ingeniería y ciencias	McGraw-Hill		970-10-4889-X (v-II)	2005	
Eisberg, robert Martin	Física	McGraw-Hill		968-451-634-2 (v2)	1990	
Lea, Susan M	Física: la naturaleza de las cosas	Paraninfo, Thimson Learning		84-283-2814-5 (T-II)	2001	
Tipler; Paul Allen	Física para la ciencia y la tecnología	Reverté		84-291-4400-5 (o.C.)	2005	