

**1. General information****Course:** CHEMISTRY**Type:** BASIC**Degree:** 365 - UNDERGRADUATE DEGREE PROGRAMME IN FOREST AND ENVIRONMENTAL ENGINEERING**Center:** 601 - E.T.S. AGRICULTURAL ENGINEERS AND MOUNTS AB**Year:** 1**Main language:** Spanish**Use of additional languages:****Web site:****Code:** 62304**ECTS credits:** 6**Academic year:** 2022-23**Group(s):** 10**Duration:** First quarter**Second language:****English Friendly:** Y**Bilingual:** N**Lecturer:** GONZALO LUIS ALONSO DIAZ-MARTA - Group(s): 10

Building/Office	Department	Phone number	Email	Office hours
ETSIAM/ Módulo 1/planta 1ª	CIENCIA Y TECNOLOGÍA AGROFORESTAL Y GENÉTICA	967 599310	Gonzalo.Alonso@uclm.es	

**Lecturer:** AMAYA ZALACAIN ARAMBURU - Group(s): 10

Building/Office	Department	Phone number	Email	Office hours
ETSIAM/ Módulo 1/planta 1ª	CIENCIA Y TECNOLOGÍA AGROFORESTAL Y GENÉTICA	926 05 29 02	Amaya.Zalacain@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
E05	
G01	Knowledge of foreign language
G03	Oral and written communication
G04	Analysis and synthesis capacity
G07	Problem solving
G08	Decision making
G10	Teamwork
G23	Ability to communicate with non-experts

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

Description

**Additional outcomes****6. Units / Contents****Unit 1:****Unit 2:****Unit 3:****Unit 4:****Unit 5:****Unit 6:****Unit 7:****Unit 8:****Unit 9:****Unit 10:****Unit 11:****Unit 12:****Unit 13:****Unit 14:****Unit 15:****Unit 16:**

Unit 17:  
 Unit 18:  
 Unit 19:  
 Unit 20:  
 Unit 21:

7. Activities, Units/Modules and Methodology							
Training Activity	Methodology	Related Competences	ECTS	Hours	As	Com	Description
Class Attendance (theory) [ON-SITE]	Lectures	E05 G03 G04 G08	1.02	27.54	Y	N	
Class Attendance (practical) [ON-SITE]	Practical or hands-on activities	E05 G07 G08 G10	0.47	12.69	Y	N	
Writing of reports or projects [OFF-SITE]	Case Studies	E05 G04 G07 G08 G10	0.39	10.53	N	-	
Problem solving and/or case studies [ON-SITE]	Problem solving and exercises	E05 G07 G08 G10	0.37	9.99	Y	N	
Study and Exam Preparation [OFF-SITE]	Problem solving and exercises	E05 G03 G07 G08	3.37	90.99	N	-	
Group tutoring sessions [ON-SITE]	Guided or supervised work	E05 G04 G07 G08 G10 G13	0.19	5.13	Y	N	
Mid-term test [ON-SITE]	Assessment tests	E05	0.19	5.13	Y	Y	
<b>Total:</b>			<b>6</b>	<b>162</b>			
<b>Total credits of in-class work: 2.24</b>				<b>Total class time hours: 60.48</b>			
<b>Total credits of out of class work: 3.76</b>				<b>Total hours of out of class work: 101.52</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
Practicum and practical activities reports assessment	25.00%	25.00%	
Assessment of active participation	10.00%	0.00%	
Mid-term tests	65.00%	75.00%	
<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).

9. Assignments, course calendar and important dates	
Not related to the syllabus/contents	
Hours	hours
<b>Unit 1 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	.5
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	1
<b>Unit 2 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1.5
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	5
Group tutoring sessions [PRESENCIAL][Guided or supervised work]	2
<b>Unit 3 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	2.5
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	6
Group tutoring sessions [PRESENCIAL][Guided or supervised work]	2
<b>Unit 4 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	4
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	8
<b>Unit 5 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	2
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	1
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	5

<b>Unit 6 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	1
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	3
Mid-term test [PRESENCIAL][Assessment tests]	.5
<b>Unit 7 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	4
<b>Unit 8 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	.5
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	3
<b>Unit 9 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	1
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	3
Mid-term test [PRESENCIAL][Assessment tests]	.5
<b>Unit 10 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	3
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	1.5
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	6
<b>Unit 11 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1
Writing of reports or projects [AUTÓNOMA][Case Studies]	2.5
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	2.5
<b>Unit 12 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1.5
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	5
<b>Unit 13 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	.5
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	2
Mid-term test [PRESENCIAL][Assessment tests]	.75
<b>Unit 14 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	5
<b>Unit 15 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	5
<b>Unit 16 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	3
Mid-term test [PRESENCIAL][Assessment tests]	.25
<b>Unit 17 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	2
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	6
<b>Unit 18 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	2
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	1
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	5
<b>Unit 19 (de 21):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	2
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	5

Unit 20 (de 21):	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	1
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	3
Unit 21 (de 21):	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	1
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	1
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	2
Group tutoring sessions [PRESENCIAL][Guided or supervised work]	1
Mid-term test [PRESENCIAL][Assessment tests]	.5
Global activity	
<b>Activities</b>	<b>hours</b>
Class Attendance (theory) [PRESENCIAL][Lectures]	27.5
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	10
Writing of reports or projects [AUTÓNOMA][Case Studies]	2.5
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	15
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	87.5
Mid-term test [PRESENCIAL][Assessment tests]	2.5
Group tutoring sessions [PRESENCIAL][Guided or supervised work]	5
<b>Total horas: 150</b>	

10. Bibliography and Sources						
Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
L. G. Wade	Química Orgánica-Volumen 2	Pearson (México)		9786073207904	2012	7 Edición
Carlos Alonso	Formulación y Nomenclatura de Química Inorgánica y Orgánica <a href="http://www.alonsoformula.com/">http://www.alonsoformula.com/</a>				2017	
FERNÁNDEZ, M. R. y FIDALGO, J.A.	1000 problemas de Química General	Everest. León.			2007	
Fernando Latre y Sergio Menargues	Problemas y Cuestiones de las Olimpiadas de Química. Volúmenes del 1 al 10 <a href="http://www.losavancesdelaquimica.com">www.losavancesdelaquimica.com</a>	Universitaria			2011	
Germán Rodríguez	Química Orgánica	Omega. Barcelona.			2016	
Herrero Villen, M. Asunción; Aienza Boronat, M. Julia; Noguera Murray, Patricia S.; Tortajada Genaro, Luis A.; Morais Ezquerro, Sergi B.	PROBLEMAS Y CUESTIONES DE QUÍMICA	Editorial Universitaria Politécnica de Valencia		978-84-9048-420-3	2015	
Kenneth Whitten, Raymond E. Davis, Larry Peck y George G. Stanley	Química 10ª Edición <a href="https://issuu.com/cengagelatam/docs/whitten_issuu">https://issuu.com/cengagelatam/docs/whitten_issuu</a>	Cengage Learning Editores			2014	
PETRUCCI, HARWOOD y HERRING	Química General 10ª Edición <a href="http://www.masteringchemistry.com">www.masteringchemistry.com</a>	PEARSON		9788415552628	2017	
Peterson W.R.	Formulación y Nomenclatura de Química Orgánica	Edunsa.				
Sykes Peter	Química Orgánica-Volumen 1	Editorial Reverté		9788429175158	2010	