

**1. General information****Course:** PHYSIFB**Type:** BASIC**Degree:** 378 - UNDERGRADUATE DEGREE PROGRAMME IN ARCHITECTURE**Center:** 606 - SCHOOL OF ARCHITECTURE OF TOLEDO**Year:** 1**Main language:** Spanish**Use of additional languages:****Web site:****Code:** 11302**ECTS credits:** 6**Academic year:** 2021-22**Group(s):** 40**Duration:** First semester**Second language:** English**English Friendly:** Y**Bilingual:** N**Lecturer:** ENRIQUE SANCHEZ SANCHEZ - Group(s): 40

Building/Office	Department	Phone number	Email	Office hours
Sabatini / 0.19	CIENCIAS AMBIENTALES	5461	e.sanchez@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
E03	Adequate and applied knowledge of the principles of general mechanics, statics, mass geometry and vector fields in architecture and town planning
E04	Adequate and applied knowledge of the principles of thermodynamics, acoustics and optics in architecture and urban planning
E05	Adequate and applied knowledge of the principles of fluid mechanics, hydraulics, electricity and electromagnetism in architecture and town planning
G01	Capacity for analysis and synthesis
G02	Organizational and planning skills
G03	Information management capacity
G04	Problem solving
G05	Decision making
G06	Critical thinking
G15	Sensitivity to environmental issues
G19	Innovation
G20	Motivation for quality
G22	Mastery of Information and Communication Technologies (ICT)
G23	Correct oral or written communication

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

From the description of a problem the student must be able to identify (1) the laws governing the phenomenon in question and (2) the data that are relevant to the case and finally arrive at the result that is requested

Acquire habits of reasoning, interpretation and analysis.

Acquire habits of critical thinking and scientific rigor that can be applied to their future professional activities.

Ability to demonstrate knowledge of concepts and principles related to the basics of wave, thermodynamics and electromagnetism.

Ability to learn and work autonomously on the physical foundations.

Ability to actively participate in the training process, both in theory and laboratory classes, problems, seminars and other complementary activities.

Ability to work with physical measuring instruments, perform experimental measurements, analyze and interpret the results and prepare a report of the study conducted.

Ability to analyze and solve basic exercises.

Recognize the relevant physical variables in each problem, learn how to measure them and calibrate the error in the measurement and results of your calculations.

To study physical reality through theoretical models and apply these models to specific cases and use them to predict phenomena.

**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:

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]	Assessment tests	E03 E04 E05	1.12	28	N	-	
Study and Exam Preparation [OFF-SITE]	Problem solving and exercises	E03 E04 E05 G01 G02 G03 G04 G06 G15 G19 G22 G23	3.6	90	N	-	
Problem solving and/or case studies [ON-SITE]	Problem solving and exercises	E03 E04 E05 G01 G02 G03 G04 G05 G06	1.12	28	Y	Y	
Final test [ON-SITE]	Assessment tests	E03 E04 E05 G01 G02 G03 G04 G05 G06 G23	0.08	2	Y	Y	
Progress test [ON-SITE]	Assessment tests	E03 E04 E05 G01 G02 G03 G04 G05 G06 G23	0.08	2	Y	N	
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
Assessment of problem solving and/or case studies	10.00%	0.00%	
Progress Tests	20.00%	0.00%	
Final test	70.00%	100.00%	
<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	
<b>Hours</b>	<b>hours</b>
Final test [PRESENCIAL][Assessment tests]	2
Progress test [PRESENCIAL][Assessment tests]	2
<b>Unit 1 (de 12):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	6
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
<b>Unit 2 (de 12):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	6
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
<b>Unit 3 (de 12):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Assessment tests]	6
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	16
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	6
<b>Unit 4 (de 12):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	6
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
<b>Unit 5 (de 12):</b>	
<b>Activities</b>	<b>Hours</b>

Class Attendance (theory) [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	15
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
<b>Unit 6 (de 12):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	14
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
<b>Unit 7 (de 12):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	4
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
<b>Unit 8 (de 12):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	4
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
<b>Unit 9 (de 12):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	5
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
<b>Unit 10 (de 12):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	6
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
<b>Unit 11 (de 12):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	4
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
<b>Unit 12 (de 12):</b>	
<b>Activities</b>	<b>Hours</b>
Class Attendance (theory) [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	4
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	2
<b>Global activity</b>	
<b>Activities</b>	<b>hours</b>
Progress test [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Problem solving and exercises]	90
Class Attendance (theory) [PRESENCIAL][Assessment tests]	28
Problem solving and/or case studies [PRESENCIAL][Problem solving and exercises]	28
Final test [PRESENCIAL][Assessment tests]	2
<b>Total horas: 150</b>	

10. Bibliography and Sources						
Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Giancoli, Douglas C.	Física para universitarios	Pearson Educación		970-26-0133-9 (v.II)	2002	
Salu, Yehuda	Physics for architects <a href="http://www.physicsforarchitects.com/">http://www.physicsforarchitects.com/</a>	Infinity Publishing		0-7414-1929-7 (rúst.	2004	
Tipler, Paul Allen	Física para la ciencia y la tecnología Física con ordenador <a href="http://www.sc.ehu.es/sbweb/fisica/default.htm">http://www.sc.ehu.es/sbweb/fisica/default.htm</a>	Reverté		84-291-4410-2	2005	