

UNIVERSIDAD DE CASTILLA - LA MANCHA

GUÍA DOCENTE

1. General information

6					0 - de 14040		
Course: S	TRUCTURES I		Code: 11312				
Type: C	ORE COURSE			ECTS	credits: 6		
Degree: 3	78 - UNDERGRADUATE DEGREE	E PROGRAMME	IN AF	CHITECTURE Academ	ic year: 2021-22		
Center: 6	06 - SCHOOL OF ARCHITECTUR	E OF TOLEDO		Gr	oup(s): 40		
Year: 2				Du	iration: C2		
Main language: S	panish			Second lan	guage: English		
Use of additional languages:				English F	riendly: Y		
Web site:				Bi	lingual: N		
Lecturer: SERGIO HOP	RTA MUÑOZ - Group(s): 40						
Building/Office	Department	Phone num	nber	Email	Office hours		
Sabatini / Despacho 1.05	MECÁNICA ADA. E ING. PROYECTOS	926052830	2830 Sergio.Horta@uclm.es				
Lecturer: MARIA DEL CARMEN SERNA MORENO - Group(s): 40							
Building/Office	Department	Phone number	Emai	l	Office hours		
Sabatini / Despacho 1.05	MECÁNICA ADA. E ING. PROYECTOS	926052569	maria	acarmen.serna@uclm.es			

2. Pre-Requisites

Not established

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

Not established

4. Degree competence	es achieved in this course
Course competences	
Code	Description
E33	Ability to conceive, calculate, design, integrate and execute building structures and urban complexes
G01	Capacity for analysis and synthesis
G02	Organizational and planning skills
G04	Problem solving
G05	Decision making
G06	Critical thinking
G07	Working in a team
G08	Working in an interdisciplinary team
G10	Interpersonal skills
G12	Self-directed learning
G13	Adaptation to new situations
G16	Creativity
G17	Leadership
G19	Innovation
G24	Ethical commitment and professional ethics

5. Objectives or Learning Outcomes

Course learning outcomes

Description

To provide the student with the ability to understand the mechanical behaviour of structures.

To involve the student in the ability to analyze the structures (obtaining stresses, strains, displacements, deformations and others) and the mechanical behavior of the soil as a structural element, applying the rules, codes and regulations established by law in the obtaining of actions as well as in the analysis of structures. Additional outcomes

6. Units / Contents		
Unit 1:		
Unit 2:		
Unit 3:		
Unit 4:		
Unit 2: Unit 3: Unit 4: Unit 5:		

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	(only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description			
Class Attendance (theory) [ON- SITE]	Lectures	E33 G01 G02 G04 G05 G06 G07 G08 G10 G13 G16 G17 G19 G24	1.1	27.5	N	-				
Class Attendance (practical) [ON- SITE]	Project/Problem Based Learning (PBL)	E33 G01 G02 G04 G05 G06 G07 G08 G10 G13 G16 G17 G19 G24	1.1	27.5	N	-				
Final test [ON-SITE]	al test [ON-SITE] Assessment tests G06 G12 G13 G16 G17 G19 G24		0.2	5	Y	Y				
Writing of reports or projects [OFF- SITE]	Group Work	E33 G01 G02 G04 G05 G06 G07 G08 G10 G12 G13 G16 G17 G19 G24	1.6	40	Y	N				
Study and Exam Preparation [OFF- SITE]			2	50	N	-				
		Total	6	150						
	Total credits of in-class work: 2.4					Total class time hours: 60				
	Total cred	dits 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				
Final test	85.00%	85.00%					
Projects	15.00%	15.00%					
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).

Hours hours Final test [PRESENCIAL][Assessment tests] 5 Writing of reports or projects [AUTÓNOMA][Self-study] 6 Unit 1 (de 5): Hours Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 4 Class Attendance (theory) [PRESENCIAL][Lectures] 4 Class Attendance (theory) [PRESENCIAL][Lectures] 9 Unit 2 (de 5): Hours Class Attendance (theory) [PRESENCIAL][Lectures] 6.5 Class Attendance (theory) [PRESENCIAL][Lectures] 6.5 Class Attendance (practical) [PRESENCIAL][Lectures] 6.5 Class Attendance (practical) [PRESENCIAL][Lectures] 6.5 Class Attendance (practical) [PRESENCIAL][Lectures] 8.5 Writing of reports or projects [AUTÓNOMA][Self-study] 10 Study and Exam Preparation [AUTÓNOMA][Self-study] 10 Unit 3 (de 5): Hours Class Attendance (hearcical) [PRESENCIAL][Lectures] 8 Class Attendance (hearcical) [PRESENCIAL][Lectures] 10 Study and Exam Preparation [AUTÓNOMA][Self-study] 10 Writing of reports or projects [AUTÓNOMA][Self-study] 1	9. Assignments, course calendar and important dates	
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Class Attendance (theory) [PRESENCIAL][Lectures]5Class Attendance (practical) [PRESENCIAL][Project/Problem Based Learning (PBL)]4Study and Exam Preparation [AUTÓNOMA][Self-study]6Unit 5 (de 5):ActivitiesClass Attendance (theory) [PRESENCIAL][Lectures]Class Attendance (practical) [PRESENCIAL][Project/Problem Based Learning (PBL)]4Class Attendance (practical) [PRESENCIAL][Project/Problem Based Learning (PBL)]2Virting of reports or projects [AUTÓNOMA][Group Work]2Study and Exam Preparation [AUTÓNOMA][Group Work]10Study and Exam Preparation [AUTÓNOMA][Self-study]5Global activity	Unit 4 (de 5):	
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Study and Exam Preparation [AUTÓNOMA][Self-study] 6 Unit 5 (de 5): Hours Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 4 Class Attendance (practical) [PRESENCIAL][Project/Problem Based Learning (PBL)] 2 Writing of reports or projects [AUTÓNOMA][Group Work] 10 Study and Exam Preparation [AUTÓNOMA][Self-study] 5 Global activity 10	Class Attendance (theory) [PRESENCIAL][Lectures]	5
Unit 5 (de 5): Hours Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 4 Class Attendance (practical) [PRESENCIAL][Project/Problem Based Learning (PBL)] 2 Writing of reports or projects [AUTÓNOMA][Group Work] 10 Study and Exam Preparation [AUTÓNOMA][Self-study] 5 Global activity 10	Class Attendance (practical) [PRESENCIAL][Project/Problem Based Learning (PBL)]	4
Activities Hours Class Attendance (theory) [PRESENCIAL][Lectures] 4 Class Attendance (practical) [PRESENCIAL][Project/Problem Based Learning (PBL)] 2 Writing of reports or projects [AUTÓNOMA][Group Work] 10 Study and Exam Preparation [AUTÓNOMA][Self-study] 5 Global activity 10	Study and Exam Preparation [AUTÓNOMA][Self-study]	6
Class Attendance (theory) [PRESENCIAL][Lectures] 4 Class Attendance (practical) [PRESENCIAL][Project/Problem Based Learning (PBL)] 2 Writing of reports or projects [AUTÓNOMA][Group Work] 10 Study and Exam Preparation [AUTÓNOMA][Self-study] 5 Global activity 10	Unit 5 (de 5):	
Class Attendance (practical) [PRESENCIAL][Project/Problem Based Learning (PBL)] 2 Writing of reports or projects [AUTÓNOMA][Group Work] 10 Study and Exam Preparation [AUTÓNOMA][Self-study] 5 Global activity 10	Activities	Hours
Writing of reports or projects [AUTÓNOMA][Group Work] 10 Study and Exam Preparation [AUTÓNOMA][Self-study] 5 Global activity 5	Class Attendance (theory) [PRESENCIAL][Lectures]	4
Study and Exam Preparation [AUTÓNOMA][Self-study] 5 Global activity 5	Class Attendance (practical) [PRESENCIAL][Project/Problem Based Learning (PBL)]	2
Global activity	Writing of reports or projects [AUTÓNOMA][Group Work]	10
	Study and Exam Preparation [AUTÓNOMA][Self-study]	5
Activities hours	Global activity	
	Activities	hours

	-	
Final test [PRESENCIAL][Assessment tests]	5	
Class Attendance (theory) [PRESENCIAL][Lectures]	27.5	
Class Attendance (practical) [PRESENCIAL][Project/Problem Based Learning (PBL)]	27.5	
Writing of reports or projects [AUTÓNOMA][Group Work]	40	
Study and Exam Preparation [AUTÓNOMA][Self-study]	50	
	Total horas: 150	

10. Bibliography and Sources	3					
Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Den Hartog, J.P.	Strength of materials	Dover			1961	Resistencia de Materiales
Foces A. y Garrido Jose A.	Foces A. y Garrido Jose A.	Secretariado de Publicaciones Universidad de Valladolid	Valladolid		2011	Resistencia de Materiales
Hanaor, A.	Principles of structures	Blackwell Science			1998	Estructuras en general
Jennings, A.	Structures, from theory to practice	Spon Press	London, UK		2004	Estructuras en general
MacDonald, Angus J.	Structure and architecture	Arquitectural Press			2001	Estructuras en general
Mario Salvatori	Estructuras para Arquitectos	La Isma	Buenos Aires		1976	Estructuras en general
Ortiz Berrocal, L.	Resistencia de materiales	MacGraw-Hill	Madrid		2007	Resistencia de Materiales
Timoshenko S.P, Gere J.M.	Resistencia de materiales	Thomsom			2002	Resistencia de Materiales
Torroja Miret, Eduardo	Razón y ser de los tipos estructurales	CSIC	Madrid		1991	Estructuras en general