

**1. General information****Course:** DIDACTICS OF GEOMETRY AND MEASUREMENT**Type:** CORE COURSE**Degree:** 308 - BACHELOR'S DEGREE IN PRIMARY EDUCATION (TO)**Center:** 104 - FACULTY OF EDUCATION OF TOLEDO**Year:** 2**Main language:** Spanish**Use of additional languages:****Web site:****Code:** 46315**ECTS credits:** 9**Academic year:** 2020-21**Group(s):** 40 41**Duration:** AN**Second language:** English**English Friendly:** Y**Bilingual:** N**Lecturer:** RAQUEL FERNANDEZ CEZAR - Group(s): 40 41

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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
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.
CG10	Design and arrange learning spaces, with consideration of diversity and gender equality, equity and respect for human rights, which constitute the values of citizenship.
CG11	Promote coexistence inside and outside the classroom, solve discipline problems and contribute to the peaceful resolution of conflicts. Boost and value pupils' effort, determination and self-discipline.
CT03	Correct oral and written communication.
CT04	Moral obligation and professional ethics.

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

Description

Show the ability to use software in school mathematics that promotes learning.

Acquire mathematical knowledge broad enough to allow students to work confidently as teachers.

Have knowledge of the new learning theories and the mathematical reasoning models and be able to design and assess activities according to those models.

Understand research about Primary school pupils' difficulties, misconceptions, concept images, etc. and be able to reflect on how these results may have influence on teaching.

Have knowledge of the curricular aspects related both to mathematics and to the implementation of teaching sequences in the (real or simulated) Primary classroom.

Cope with diversity in the classroom.

Know how to use the basic elements of the history of mathematics to promote learning on specific occasions.

Know how to use teaching materials and other resources to encourage learning.

Acquire evaluation skills both about mathematical knowledge and Primary school pupils' learning processes.

6. Units / Contents**Unit 1:****Unit 2:****Unit 3:****Unit 4:****Unit 5:****Unit 6:****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]	Problem solving and exercises	CB02 CG10 CG11 CT03 CT04	0.6	15	Y	Y	

Class Attendance (theory) [ON-SITE]	Lectures	CB02 CG10 CG11 CT03 CT04	1.56	39	Y	N	
Project or Topic Presentations [ON-SITE]	Group Work	CG10 CG11 CT03	0.6	15	Y	N	
Writing of reports or projects [OFF-SITE]	Cooperative / Collaborative Learning	CB02 CG10 CG11 CT03 CT04	1.48	37	Y	Y	
Study and Exam Preparation [OFF-SITE]	Self-study		1.8	45	Y	Y	
Workshops or seminars [ON-SITE]	Practical or hands-on activities		0.68	17	Y	N	
Progress test [ON-SITE]	Assessment tests		0.08	2	Y	Y	
Writing of reports or projects [OFF-SITE]	Self-study	CB02 CG10 CG11 CT03 CT04	2.12	53	Y	N	
Final test [ON-SITE]	Assessment tests		0.08	2	Y	Y	
Total:			9	225			
Total credits of in-class work: 3			Total class time hours: 75				
Total credits of out of class work: 6			Total hours of out of class work: 150				

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	35.00%	70.00%	
Progress Tests	35.00%	10.00%	
Oral presentations assessment	20.00%	20.00%	
Assessment of active participation	10.00%	0.00%	
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).

9. Assignments, course calendar and important dates	
Not related to the syllabus/contents	
Hours	hours
Unit 1 (de 6):	
Activities	Hours
Writing of reports or projects [AUTÓNOMA][Problem solving and exercises]	2
Class Attendance (theory) [PRESENCIAL][Lectures]	6
Writing of reports or projects [AUTÓNOMA][Cooperative / Collaborative Learning]	5
Writing of reports or projects [AUTÓNOMA][Self-study]	3
Group 40:	
Initial date: 19-09-2018	End date: 29-09-2018
Group 41:	
Initial date: 19-09-2018	End date: 29-09-2018
Group 42:	
Initial date: 07-09-2018	End date:
Unit 2 (de 6):	
Activities	Hours
Writing of reports or projects [AUTÓNOMA][Problem solving and exercises]	4
Class Attendance (theory) [PRESENCIAL][Lectures]	6
Writing of reports or projects [AUTÓNOMA][Cooperative / Collaborative Learning]	5
Study and Exam Preparation [AUTÓNOMA][Self-study]	2
Workshops or seminars [PRESENCIAL][Practical or hands-on activities]	3
Writing of reports or projects [AUTÓNOMA][Self-study]	10
Group 40:	
Initial date: 03-10-2018	End date: 13-10-2018
Group 41:	
Initial date: 03-10-2018	End date: 13-10-2018
Unit 3 (de 6):	
Activities	Hours
Writing of reports or projects [AUTÓNOMA][Problem solving and exercises]	3
Class Attendance (theory) [PRESENCIAL][Lectures]	10
Writing of reports or projects [AUTÓNOMA][Cooperative / Collaborative Learning]	15
Study and Exam Preparation [AUTÓNOMA][Self-study]	10
Workshops or seminars [PRESENCIAL][Practical or hands-on activities]	5
Writing of reports or projects [AUTÓNOMA][Self-study]	10
Group 40:	
Initial date: 17-10-2018	End date: 17-11-2018
Group 41:	

Initial date: 17-10-2018		End date: 17-11-2018
Unit 4 (de 6):		
Activities		Hours
Writing of reports or projects [AUTÓNOMA][Problem solving and exercises]		1
Class Attendance (theory) [PRESENCIAL][Lectures]		5
Writing of reports or projects [AUTÓNOMA][Cooperative / Collaborative Learning]		10
Study and Exam Preparation [AUTÓNOMA][Self-study]		9
Workshops or seminars [PRESENCIAL][Practical or hands-on activities]		4
Progress test [PRESENCIAL][Assessment tests]		2
Writing of reports or projects [AUTÓNOMA][Self-study]		15
Group 40:		
Initial date: 26-01-2019		End date: 20-02-2019
Group 41:		
Initial date: 26-01-2019		End date: 20-02-2019
Unit 5 (de 6):		
Activities		Hours
Class Attendance (theory) [PRESENCIAL][Lectures]		3
Project or Topic Presentations [PRESENCIAL][Group Work]		7
Writing of reports or projects [AUTÓNOMA][Cooperative / Collaborative Learning]		2
Study and Exam Preparation [AUTÓNOMA][Self-study]		5
Workshops or seminars [PRESENCIAL][Practical or hands-on activities]		2
Writing of reports or projects [AUTÓNOMA][Self-study]		5
Group 40:		
Initial date: 26-01-2019		End date: 20-03-2019
Group 41:		
Initial date: 26-01-2019		End date: 20-03-2019
Unit 6 (de 6):		
Activities		Hours
Writing of reports or projects [AUTÓNOMA][Problem solving and exercises]		5
Class Attendance (theory) [PRESENCIAL][Lectures]		9
Project or Topic Presentations [PRESENCIAL][Group Work]		8
Study and Exam Preparation [AUTÓNOMA][Self-study]		19
Workshops or seminars [PRESENCIAL][Practical or hands-on activities]		3
Writing of reports or projects [AUTÓNOMA][Self-study]		10
Final test [PRESENCIAL][Assessment tests]		2
Group 40:		
Initial date: 07-09-2018		End date:
Group 41:		
Initial date: 07-09-2018		End date:
Global activity		
Activities		hours
Writing of reports or projects [AUTÓNOMA][Problem solving and exercises]		15
Class Attendance (theory) [PRESENCIAL][Lectures]		39
Project or Topic Presentations [PRESENCIAL][Group Work]		15
Writing of reports or projects [AUTÓNOMA][Cooperative / Collaborative Learning]		37
Study and Exam Preparation [AUTÓNOMA][Self-study]		45
Workshops or seminars [PRESENCIAL][Practical or hands-on activities]		17
Writing of reports or projects [AUTÓNOMA][Self-study]		53
Progress test [PRESENCIAL][Assessment tests]		2
Final test [PRESENCIAL][Assessment tests]		2
		Total horas: 225

10. Bibliography and Sources						
Author(s)	Title/Link	Publishing house	City	ISBN	Year	Description
A. Alsina, coord.	Educación matemática y buenas prácticas. Infantil, primaria,	Graó		978-84-7827-695-0	2009	
Alsina, C.; Burgués, C. y Fortuny, J.M.	Invitación a la Didáctica de la Geometría.	Síntesis	Madrid		1987	
Chamorro, Carmen y Belmonte, Juan M	El problema de la medida, Didáctica de las Magnitudes lineales	Síntesis, S.A	Madrid		2000	
Díaz Godino, J. (dir.)	Matemáticas para maestros http://www.ugr.es/local/igodino/edumat-maestros/					
Luis Rico y Alex Segovia, coords.	Matemáticas para maestros de Educación Primaria http://www.edicionespiramide.es/libro.php?id=2928254	Pirámide		978-84-368-2565-7	2011	
Norte Checa, Andres	Matemáticas y su didáctica	Diego Marín librero editor			2007	
Ruiz Higuera, Luisa, Vecino Rubio, Francisco, Belmonte	Didáctica de las Matemáticas	Colección didáctica Infantil, PEARSON			2008	

