

SUBJECT TEACHING GUIDE

G541 - Mathematics in Context

Degree in Early Childhood Education
Degree in Primary Education Teaching

Academic year 2020-2021

1. IDENTIFYING DATA					
Degree	Degree in Early Childhood Education Degree in Primary Education Teaching			Type and Year	Optional. Year 3 Optional. Year 3
Faculty	School of Teacher Training				
Discipline	Subject Area: Mathematics in Context Module: Complementary or Specialised Training				
Course unit title and code	G541 - Mathematics in Context				
Number of ECTS credits allocated	6	Term	Semester based (1)		
Web					
Language of instruction	Spanish	English Friendly	Yes	Mode of delivery	Face-to-face

Department	DPTO. MATEMATICAS, ESTADISTICA Y COMPUTACION				
Name of lecturer	MARIO ALFREDO FIORAVANTI VILLANUEVA				
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Office	Facultad de Ciencias. Planta: + 0. DESPACHO PROFESORES (0055)				
Other lecturers					

3.1 LEARNING OUTCOMES

- To associate mathematical models with real life situations, and use them to facilitate learning and understanding of mathematics.
- Knowledge and practice of problem solving in Kindergarten and Primary Education.
- Ability to use TIC for presentation, exploration and discovery of mathematical contents in Kindergarten and Primary Education.

4. OBJECTIVES

- Understand the role of mathematics in everyday life.
- View the value of mathematical knowledge for developing basic skills and competencies.
- Achieve the ability to transmit these experiences to their future students.
- To improve the mathematics competencies of the students.

6. COURSE ORGANIZATION

CONTENTS

1	Contexts that favor mathematics learning. Modelling of everyday situations.
2	Mathematical competence and mathematics in context.
3	Problem solving. Dynamical geometry.
4	Materials, web resources and programs for teaching numbers, measurement, data processing and geometry. Project based learning.

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Activities, 40%	Others	No	Yes	40,00
Participation in blog debates, 30%.	Activity evaluation with Virtual Media	No	Yes	30,00
Written work and oral presentation, 30%.	Work	No	Yes	30,00
TOTAL				100,00

Observations

The Faculty of Education has approved the following agreements regarding spelling, plagiarism and citation rules.

ORTHOGRAPHY

It is understood that university students have assumed linguistic abilities in relation to oral and written expression. Therefore, correct spelling and grammar in the work and exams is an essential condition to pass the course.

PLAGIARISM

In case of fraudulent realization (plagiarism) of the evaluation activities, the grades will adjust to the article 54.1 of the Regulation of the evaluation processes in the University of Cantabria: 'The fraudulent realization of the tests or evaluation activities will directly involve the grade of '0' (fail) in the course'.

CITATION RULES

The APA Standards are assumed as a citation criterion for all academic works. Although these standards have different editions, as a starting point, students are referred to the following link of the BUC:

<http://web.unican.es/buc/recursos/guias-y-tutoriales/guia?g=28>

Observations for part-time students

Part-time students may choose a single exam evaluation.

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

Ángel Alsina i Pastells. Educación matemática en contexto: de 3 a 6 años, Barcelona: Horsori, 2011.

K. Stacey, S. Groves. Resolver problemas: Estrategias. Madrid: Narcea, 1999.

Isabel Echenique. Matemáticas. Resolución de Problemas. Educación Primaria. Gobierno de Navarra.
<http://dpto.educacion.navarra.es/publicaciones/pdf/matematicas.pdf>