

SUBJECT TEACHING GUIDE

G541 - Mathematics in Context

Double Degree in Teaching in Early Childhood Education and Primary Education
Degree in Early Childhood Education
Degree in Primary Education Teaching
Academic year 2023-2024

1. IDENTIFYING DATA					
Degree	Double Degree in Teaching in Early Childhood Education and Primary Education			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	JOSE MANUEL DIEGO MANTECON				
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Other lecturers	MARIO ALFREDO FIORAVANTI VILLANUEVA				

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	Materials, online resources and programs for teaching numbers, measurement, information processing and geometry. Dynamic geometry.
3	Designing problems in context through STEAM projects with KIKS format.
4	Mathematical competence and mathematics in context. Problem-solving through adaptive strategies.

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Assessment activity related to blocks 1 and 2 (35%)	Others	No	Yes	35,00
Participation in blog debates, 30%.	Activity evaluation with Virtual Media	No	Yes	15,00
Assessment activity related to blocks 3 and 4 (50%)	Work	No	Yes	50,00
TOTAL				100,00

Observations

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

ASSESSMENT/EVALUATION

Article 35.- If a student does not obtain the grade minimum required to pass an evaluation test, the overall grade for the subject will be the lowest value between 4.9 and the weighted average of all assessment tests.

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.

FRAUDULENT PERFORMANCE OF TESTS OR EVALUATION ACTIVITIES

Article 32. Penalty. The fraudulent performance of the tests or evaluation activities will directly result in the failure grade '0' in the subject in the corresponding call, thereby invalidating any grade obtained in all the evaluation activities for the extraordinary call. This circumstance will be communicated to the Center.

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

Article 24. (...) the student may undergo a single evaluation process. The single evaluation will entitle the student to obtain the same grade as the students who undergo continuous evaluation processes. The single assessment may consist of taking an exam or/and the delivery of work, exceptionally being able to establish the obligation to attend and pass certain face-to-face activities (laboratory classes, clinical practices, seminars, etc.

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>