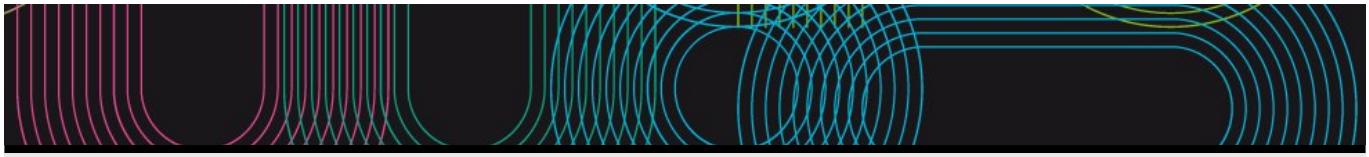

IDENTIFYING DATA				
Mathematics teaching resources				
Subject	Mathematics teaching resources			
Code	O05G120V01911			
Study programme	Grado en Educación Primaria			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	2nd
Teaching language	#EnglishFriendly Galician			
Department				
Coordinator	Valente da Silva Couto, Maria Joao			
Lecturers	Valente da Silva Couto, Maria Joao			
E-mail	mvalente@uvigo.es			
Web	http://https://moovi.uvigo.gal/login/index.php			
General description	In this subject, students acquire mathematical skills and knowledge needed for their profession development. English Friendly subject International students may request from the teachers: a) materials and bibliographical references in English, b) tutoring sessions in English, c) exams and assessments in English.			

Training and Learning Results	
Code	
B1	Know the curricular areas of Primary Education, the interdisciplinary relation between them, the evaluation criteria and the body of didactic knowledge that encompasses the teaching and learning procedures.
B2	Design, plan and evaluate teaching and learning processes, both individually and in collaboration with other teachers and professionals from the centre.
B4	Design and regulate learning spaces in diversity contexts, to address gender equality, equity and respect for human rights that constitute the values of citizenship training.
B6	Know how primary education schools are organised and the diversity of actions in their operation. Perform functions of mentoring and guidance to students and their families, addressing the singular learning needs of students. Assume that the performance of teaching needs to be refined and adapted to scientific, pedagogical and social changes throughout life.
B10	Reflect on classroom practices to innovate and improve teaching. Acquire habits and skills for autonomous and cooperative learning and promote them among students.
B11	Know and apply the information and communication technologies in classrooms. Selectively discern audio-visual information that contributes to learning, civic training and cultural wealth.
B12	Understand the role, possibilities and limits of education in today´s society and the key competencies that affect the primary education schools and their professionals. Know quality improvement models that can be applied to educational centres.
C38	Acquire basic maths skills (numeric, calculus, geometry, spatial representations, estimation and measurement, organisation and interpretation of information, etc.).
C39	Know the mathematics syllabus
C40	Analyse, reason and communicate mathematical proposals. Put forward and solve problems related to everyday life.
C41	Assess the relationship between mathematics and science as one of the pillars of scientific thought.
C42	Develop and evaluate curriculum contents using appropriate teaching resources and promote the corresponding competencies in students.
D1	Capacity for analysis and synthesis
D2	Capacity for organisation and planning
D3	Oral and written communication in the native language.
D5	Knowledge of computing related to the field of study
D6	Capacity for information management
D7	Troubleshooting
D8	Decision-making

D9	Team work
D13	Recognition of diversity and multiculturalism
D14	Critical reasoning
D16	Autonomous learning
D17	Adaptation to new situations
D18	Creativity
D21	Initiative and an entrepreneurial spirit

Expected results from this subject

Expected results from this subject	Training and Learning Results		
1. Acquire basic mathematical skills.	B1 B10 B11	C38	D1 D2 D3 D5 D6 D7 D8 D9 D14 D16 D17 D18 D21
2. Know school mathematics curriculum.	B1 B2 B4	C39 C42	D6 D9 D13 D16
3. Analyze, ratiocinate and communicate mathematical proposals.	B2 B4 B6 B10 B11	C40	D1 D2 D3 D5 D6 D7 D9 D13 D14 D18
4. Present and solve problems related to everyday life.	B1 B2 B4 B6 B10 B11	C40	D1 D2 D3 D5 D7 D9 D13 D14 D16 D17 D18
5. Value the relationship between mathematics and science as a scientific knowledge cornerstone.	B1 B4 B10 B11 B12	C41	D6 D9 D13 D16 D18 D21

Contents

Topic	
Problem solving	Strategies
Materials for calculus	Numbers and operations
Materials for geometry	Geometry: plane and space
Materials for measurement	Measurement of time, lengths, angles, areas and volumes
New technologies	Internet resources. Education mathematics software

Planning

	Class hours	Hours outside the classroom	Total hours
Introductory activities	2	2	4
Mentored work	25	40	65
Presentation	25	40	65
Objective questions exam	2	14	16

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies

	Description
Introductory activities	Initial activities to present the discipline.
Mentored work	Design of educational interventions.
Presentation	

Personalized assistance

Methodologies	Description
Introductory activities	Resolution of students' doubts regarding different discipline activities. Personalized attention will be guaranteed in tutoring sessions and/or during the class. Telematic resources could be used to carry out the tutorials sessions (email, Moovi, Campus Remoto).
Mentored work	Resolution of students' doubts regarding different discipline activities. Personalized attention will be guaranteed in tutoring sessions and/or during the class. Telematic resources could be used to carry out the tutorials sessions (email, Moovi, Campus Remoto).
Tests	**Description**
Objective questions exam	_

Assessment

	Description	Qualification	Training and Learning Results		
Mentored work	Individual work or elaborated in cooperative teams. It will be corrected according to evaluation rubrics.	35	B1 B2 B4 B10 B11 B12	C38 C39 C40 C41 C42	D1 D2 D3 D5 D6 D7 D8 D9 D13 D14 D16 D17 D18 D21
Presentation	Work presentation.	35	B1 B2 B4 B6 B10 B11 B12	C38 C39 C40 C41 C42	D1 D2 D3 D5 D6 D7 D8 D9 D13 D14 D16 D17 D18 D21
Objective questions exam	Exam for acquired competences evaluation. It includes direct questions. Students would have to answer in a direct and brief way regarding their knowledge about the discipline.	30			D7

Other comments on the Evaluation

- Every student, whether he/she attends classes or not, has the right to be evaluated.
- In case the student does not pass the subject in the first-attempt, he/she will be evaluated on non acquired

competences in second-attempt (June-July).

- Parts of the discipline approved in the 1st opportunity won't be evaluated in the 2nd one, considering, therefore, as approved in this academic year.
- Alined with inclusive principles that characterize the Faculty of Education and Social Service, this guide may be adapted to the specific needs of pedagogical support presented by students enrolled in the PIUNE program (PAT).

ASSESMENT CRITERIA FOR NON ATTENDING STUDENTS

Objective questions exam

Description: Exam for acquired competences evaluation. It includes direct questions. Students would have to answer in a direct and brief way regarding their knowledge about the discipline.

Qualification: 60%.

Evaluated competences: CE38, CE39, CE42

Supervised work:

Descripción: Design of didactic sequences taking into account Primary Education Mathematics curriculum competences.

Qualification: 40%

Evaluated competences: all the subject competences

The official dates of the exams can be consulted in the web page of the faculty(http://fcced.uvigo.es/gl/docencia/exames)

Sources of information

Basic Bibliography

Cascallana, M.T., **Iniciación a la Matemática. Materiales y recursos didácticos**, 1, Santillana, 1988

Chamorro, M. C., **Didáctica de las Matemáticas para Primaria**, 1, Pearson Education, 2003

Godino J. D. Y otros, **Didáctica de las Matemáticas para Maestros**, 2004

Godino J. D. Y otros, **Matemáticas para Maestros**, 2004

Resnik, L. y Ford, W., **La enseñanza de las matemáticas y sus fundamentos psicológicos**, 1, Paidós/MEC, 1990

Rico, L, **Conocimiento numérico y formación del profesorado**, 1, Servicio publicaciobes Universidad de Granada, 1995

Skemp, R., **Psicología del aprendizaje de las matemáticas**, 1, Morata, 1980

Complementary Bibliography

Alsina, C. y otros, **Invitación a la geometría**, 1, Síntesis, 1987

Baroody, A., **El pensamiento matemático de los niños**, 1, Visor/MEC, 1988

Beard, R, M., **Psicología evolutiva de Piaget: una hipótesis para educadores**, 1, Kapelusz, 1979

Dickson, L. et al., **El aprendizaje de las Matemáticas**, 1, Labor, 1991

Guibert, A. et al., **Actividades geométricas para Educaión Infantil**, 1, Narcea, 1993

Lovell, S., **El desarrollo de los conceptos básicos y científicos en los niños**, 1, Morata, 1977

Orton A., **Didáctica de las matemáticas. Cuestiones, teoría y práctica en el aula**, 1, Morata/MEC, 1990

Piaget, J. y Szeminska, A., **Génesis del número en el niño**, 1, Guadalupe, 1973

Recommendations

Subjects that it is recommended to have taken before

Mathematics and its teaching 1/P02G120V01304
Mathematics and its teaching 2/P02G120V01405

Other comments

This discipline takes place in a Faculty committed with environment sustainability and people. Alined with this philosophy, this discipline will promote educational practices based on materials of low environmental impact consistent with the principles of sustainability (SDG).