Universitat Autònoma de Barcelona

2020/2021

Mathematics at School

Code: 102057
ECTS Credits: 6

Degree	Type	Year	Semester
2500798 Primary Education	OT	4	0

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

Teachers

Laura Morera Ubeda

Prerequisites

It is suggested that students who enroll in this course have taken and passed the first-year course " Mathematics

Objectives and Contextualisation

This course focuses on developing professional skills and teaching mathematical analysis, based on analysis of r
Taught when students have already completed the three compulsory sub
The course puts students in situations of vision must have in relation to s

The specific objectives are:

An overview that permetiguiar and organize the teaching of mathemati

Knowing how to organize a database that allows unite agreements line

Have the necessary elements to create the team of teachers a positive

Competences

- Analyse, reason and communicate mathematical proposals.

- Critically analyse personal work and use resources for professional development.
- Design and regulate learning spaces in contexts of diversity that take into account gender equality, equity and respect for human rights and observe the values of public education.
- Design, plan and evaluate education and learning processes, both individually and in collaboration with other teachers and professionals at the centre.
- Develop and evaluate contents of the curriculum by means of appropriate didactic resources and promote the corresponding skills in pupils.
- Develop autonomous learning strategies.
- Incorporate information and communications technology to learn, communicate and share in educational contexts.
- Know how primary schools are organised and about the diversity of actions involved in running them.
- Know the curricular areas of Primary Education, the interdisciplinary relation between them, the evaluation criteria and the body of didactic knowledge regarding the respective procedures of education and learning.
- Maintain a critical and autonomous relationship with respect to knowledge, values and public, social and private institutions.
- Reflect on classroom experiences in order to innovate and improve teaching work. Acquire skills and habits for autonomous and cooperative learning and promote it among pupils.
- Stimulate and value effort, constancy and personal discipline in pupils.
- Value the relationship between mathematics and sciences as one of the pillars of scientific thought.

Learning Outcomes

1. Adapt teaching and learning programs and activities to pupil diversity.
2. Analyse the goals of mathematics education at different stages of primary education.
3. Assessing the value of, and applying professional cases relating to, the teaching of mathematics.
4. Design innovative teaching sequences from contexts that provide recreational mathematics.
5. Design teaching / learning strategies in which the assumptions of personal decisions are prioritized, and the identification of relevant information for individual projects.
6. Design teaching and learning sequences that connect different mathematical topics.
7. Develop mathematical content from the primary curriculum based on the use of mathematical games and recreations.
8. Identifying, designing and communicating concepts, facts and phenomena of different sciences capable of being modelled using mathematical concepts.
9. Understand and apply indicators for the evaluation and design of proposals for mathematics education from a perspective of gender equity and equality.
10. Understand and critically evaluate educational software and related web-based resources in the gaming world that are suitable for teaching and learning mathematics.
11. Understand recreational didactic situations involving mathematics, both inside and outside the classroom, to promote independent learning and cooperative work.

Content

1. The math teacher begins to work ...

1.1 Attitudes, involvement and commitment
1.2 Style and project center

2. The master class in math (compared with students)
2.1 Activities and competitions in mathematics
2.2 Resources to bring the classroom
2.3 Complementary activities
2.3.1.- Activities in the school library, theater, classroom psychomotor ...
2.3.2.- Activities in the neighborhood
2.3.3.- visits to exhibitions, museums ...

3. The teacher of mathematics at times courtyard (in relation to the team
3.1 The world of lifelong learning.
3.1.1.- Training days
3.1.2.- network resources (resource bank, special pages ...)
3.1.3.- Associations math teachers
3.1.4.- journals recommended level
3.2 Promotion of mathematical activities for companions
3.2.1.- workshops, exhibitions, fairs, conferences ...

4. The teacher of mathematics when the bell rings to go (relative to the c
4.1 manipulable materials
4.2 Educational Software
4.3 Bibliography mathematics
4.4.- Textbooks

5. The teacher of mathematics is everything!
5.1 Mainstreaming the subject
5.2 The verticality of the course
5.4 Attention to the transition between stages

Methodology

There will be exhibitions by the teacher and other teachers invited expert in the teaching of mathematics.
It will carry out activities and group discussions later exhibited in public.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Classes	5	0.2	3
Conferences	11	0.44	3
Explanations	12	0.48	

Paper	15	0.6	2
Presentations	4	0.16	4
Type: Supervised			
Individual test	13	0.52	
Work in group	15	0.6	3
Type: Autonomous			
Didactic sequency	45	1.8	4
Discussions	15	0.6	
Readings	15	0.6	

Assessment

The evaluation of the course will take place throughout the academic year through the activities shown in the grid

Class attendance is mandatory: students must attend all classes to be ev
Also considered absent the student who has not delivered all evaluation
The student must have for each section of the assessment at least 5 and
In the case of students who have attended classes but not exceeding five
According to the regulations UAB, plagiarism or copying of any work will

The date of the assessment test will be the last day of the subject.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Discussions	30	0	0	2, 11, 4
Individual test	10	0	0	9, 10, 3
Oral expositions	30	0	0	7, 4, 3
Work of children	30	0	0	1, 10, 11, 5, 6, 8

Bibliography

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