

**Mathematical Games and Activities in Early
Childhood Education**

Code: 101985
ECTS Credits: 6

Degree	Type	Year	Semester
2500797 Early Childhood Education	OT	4	0

Contact

Name: Maria Neus Font Garriga
Email: MariaNeus.Font@uab.cat

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

Maria Neus Font Garriga

Prerequisites

It is necessary that the student has approved the contents and use of the compulsory third and fourth:

- The mathematics curriculum in kindergarten.
- Practice math classroom Childhood Education.

Objectives and Contextualisation

It is an optional subject in the fourth year is focused on a specific teaching. Taught when students have already done all the basic training and then race "Mathematics curriculum the child" and "The mathematical practice in the classroom Childhood Education." That is why the subject: Games and activities in math education child wants to deepen the knowledge of teaching mathematics in kindergarten and primary school.

This course focuses on practical knowledge of math curriculum nursery and primary school, but also will review different mathematical content of older ages. The dynamic classroom will be in workshop format where you live in first person which is the 'mathematical challenge', learning from open questions, cooperative work and aprenentatge from selected materials handling.

Skills

- Consider classroom practical work to innovate and improve teaching.
- Demonstrate knowledge and understanding of the aims, curricular contents and criteria of evaluation of Infant Education
- Design and regulate learning spaces in diverse contexts which attend to the particular issues of pupils regarding gender equality, equity and respect for human rights.
- Develop strategies for autonomous learning.

- Promote and facilitate early infant learning, from a global and integrative perspective of different cognitive, emotional, psychomotor and developmental dimensions.
- Promoting experiences of initiation into information and communication technologies.
- Understand mathematics as sociocultural knowledge.
- Understand teaching strategies to develop numerical representations and spatial geometric and logical development notions.
- Understand the scientific, mathematical and technological bases of the curriculum at this stage as well as theories on the acquisition and development of the corresponding learning.
- Work in teams and with teams (in the same field or interdisciplinary).

Learning outcomes

1. Apply key elements of the mathematics curriculum to a personal design.
2. Be able to analyse a learning situation, assess its relevance and make innovative alternative proposals.
3. Be able to design personal teaching situations based on the curriculum and theoretical guidelines and examples shown in the subject for the teaching and learning of mathematics in infant education.
4. Be able to design, plan and execute a personal search.
5. Be able to draw on best mathematical practices to create new and personal ones.
6. Be able to identify mathematical aspects in everyday life and be able to potentiate them and share them with children to facilitate their learning.
7. Be able to include attention to diversity, gender equality, equity and respect for human rights in ones own design.
8. Be able to organize both personal and group work to design and implement a joint project.
9. Know about didactic situations and experiences that are created with a global and inclusive perspective of different cognitive, emotional, psychomotor and volitional dimensions.
10. Understand learning and teaching theory as governed by the mathematics curriculum.
11. Understand the diversity of educational situations designed around the mathematics curriculum.
12. Understand the diversity of interdisciplinary teaching situations for teaching and learning of mathematics in kindergarten.
13. Using technologies in the design of didactic proposals for teaching and learning mathematics in nursery school or the initial cycle of primary school.

Content

1. Game and fun activity
2. Early childhood games and his relationship with mathematics.
3. Involvement in a community learning.
4. Learning math through a workshop.
5. Mathematical programming adapting to the group.
6. Review of mathematical concepts from different blocks and different ages.
7. Creativity and rigor in the design and implementation of a workshop session in the community.

Methodology

The methodology of this course is in a workshop format. You will learn 'doing'. Each session will focus on the manipulation of various teaching materials. autonomy and creativity of students are especially encouraged. Thou must reflect and also the most relevant record in writing of each session.

We made a visit to a center outside the university, compulsory and evaluable.

Activities

Title	Hours	ECTS	Learning outcomes
Type: Directed			

Large group	45	1.8	11
Type: Supervised			
Analysis of materials and classroom experiences	30	1.2	4
Type: Autonomous			
Autonomous activity	75	3	4, 11

Evaluation

There will be a part of a group and individual assessment. The individual is a newspaper each session plus extensions that students consider. The working group is to prepare and conduct a workshop session of play and fun activity. This course will include a compulsory excursion.

Class attendance is mandatory: students must attend all classes to be evaluated (maximum 20% contemplates incidents), otherwise it will be considered absent. Also considered absent the student who has not delivered all evaluation activities within the established deadlines. The results of each evaluation will be returned to students within a maximum period of three weeks after its release, and offered a date for review within 10 days following its publication.

To pass this course, the student must show, in the activities offered to them, a good general communicative competence, both orally and in writing and a good command of the language used in the guide that consists of teaching. If the subject of plagiarism is suspended.

The evaluation is continuous, you will have to deliver the class newspaper on the day of the course. The reevaluation will take place the first place the first week of July.

Evaluation activities

Title	Weighting	Hours	ECTS	Learning outcomes
Design and implementation of a workshop session	30	0	0	1, 2, 6, 7, 5, 8, 3, 4, 11, 12, 10, 9, 13
Individual work. Journal sessions	50	0	0	6, 7, 3, 4, 11, 12, 10, 9, 13
Self evaluation	20	0	0	2, 8, 11, 12, 10, 9, 13

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