

Academic Year/course: 2022/23

26637 - Mathematics: Learning Difficulties

Syllabus Information

Academic Year: 2022/23

Subject: 26637 - Mathematics: Learning Difficulties

Faculty / School: 107 - Facultad de Educación

Degree: 298 - Degree in Primary School Education

ECTS: 6.0

Year: 4

Semester: First semester

Subject Type: Optional

Module:

1. General information

2. Learning goals

2.2. Learning goals

1. The student analyzes the specific difficulties that pupils may encounter on the learning of arithmetics. As a result the student understands the need of using didactical resources in the teaching and learning processes.
2. The student plans, selects resources and designs personalized recovery teaching activities.
3. The student assess the didactical intervention and precisely describes its effects. He describes the knowledge stages and the difficulties observed in the pupil.

3. Assessment (1st and 2nd call)

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The learning process designed for this subject is based on the presence of the prospective teacher in a school center to carry out didactic interventions with the intention of detecting and treating the mathematical learning difficulties of a Primary School student. This teaching intervention allows him/her to observe, act and reflect on what is observed with the help of the teachers of the subject, establishing a link between the theory studied in the subjects Didactics of Arithmetic I, Didactics of Arithmetic II and the professional practice. This practice is complemented by the small group seminar classes (between 4 and 6 students) held at the Faculty, which allow to analyze what has been observed and to prepare new interventions with the help of the professors of the subject. As a result, the student is expected to acquire competencies that allow him/her to better integrate the theoretical knowledge taught in the degree and, on the other hand, an experimental knowledge of great utility for his/her later incorporation into the teaching profession.

This course presents different methodological strategies to develop the assigned competences. The methodology followed in this course include:

Lectures

Active learning methodologies

Group or individual assignments

Oral presentation and discussion of projects

Tutorials

4.2. Learning tasks

This is a 6 ECTS course organized as follows:

- Theory session (18 hours). The contents described in the following section of this guide are studied.
- Internship (30 hours, 20 lessons x 1,5 hours each). Lessons taught by the students at CEIP *Recarte y Ornat* accompanied and assisted by the teaching staff of this subject.
- Seminar (12 hours). Seminar sessions in small group, from 4 to 6 students, devoted to review their interventions and design new proposals to develop at the school. Each student receives 12 hours of teaching: in 6 of them the student will have an active participation since these hours will be focused in the Primary School year in which he/she is involved. In the other 6 hours the student will have less participation since these will be focused on another Primary School year.
- Assessment (6 hours).
- Autonomous work (84 hours). It includes the homework proposed by the teaching staff of this subject, as well as the search and elaboration of didactic materials, analysis of their didactic interventions and preparation of reports.

4.3. Syllabus

The course will address the following topics:

- Learning difficulties in arithmetic and their causes.
- Criteria for developing teaching interventions on school arithmetic.
- Outline of the session comprising the following situations: recitation, cardinality and ordinality with counting, problem solving, reading and writing of numbers, oral and written operations and arithmetic games.
- Design and use of didactic materials for the teaching of school arithmetic.

4.4. Course planning and calendar

Control and assessment sessions of the group assignment may be scheduled outside the class timetable or shift depending on the teacher's availability. The specific schedules will be fixed in the first weeks of the course.

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to the "<https://moodle2.unizar.es/add/>".

4.5. Bibliography and recommended resources

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=26637>