

Academic Year/course: 2021/22

26626 - Didactics: Arithmetic II

Syllabus Information

Academic Year: 2021/22

Subject: 26626 - Didactics: Arithmetic II

Faculty / School: 107 - Facultad de Educación

202 - Facultad de Ciencias Humanas y de la Educación

301 - Facultad de Ciencias Sociales y Humanas

Degree: 298 - Degree in Primary School Education

299 - Degree in Primary School Education

300 - Degree in Primary School Education

ECTS: 6.0

Year: 3

Semester: First semester

Subject Type: Compulsory

Module:

1. General information

2. Learning goals

3. Assessment (1st and 2nd call)

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The future teacher must develop a didactic action focused on problem solving and on the interaction of the child with its material and social environment. Therefore, the teaching offered in this subject is based on the same principles. In general, the master class will not have the traditional function of sequential presentation of contents, but will serve to anchor the contents, both mathematical and didactic, which have previously appeared in the practical classes, around the tasks of problem solving, case studies, etc?

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

Theory sessions. In these sessions, the teacher will explain theoretical contents with a more interactive and participative character than the master class.

Practice sessions (split group). In the practical sessions, students will solve problematic situations, questions, cases... manipulating different didactic materials, in order to answer the questions that are raised in the script of practices. These activities will be both mathematical and didactic in nature. To answer the questions, it will be necessary to construct new concepts, and deeply review those already known.

Problem sessions. In some theoretical sessions, students will be proposed to solve problems of mathematical and/or didactic content. Some of them will be solved in class, while others will be handed in and will therefore have their weight in the continuous evaluation grade.

Group work. A part of the assessment of the subject will be a team assignment. Teams will be formed by five students, approximately. Previously arranged seminars will be held to detail the work to be done, to supervise its progress and to evaluate the participation of each one of the team members.

The student's allotted time to these activities is as follows:

- Practice sessions: 20 hours + 10 hours (autonomous work) = 30 hours (total)
- Theory sessions: 22 hours + 30 hours (autonomous work) = 30 hours (total)
- Problem sessions: 14 hours + 25 hours (autonomous work) = 39 hours (total)
- Group work: 2 hours + 18 hours (autonomous work) = 20 hours (total)
- Exams: 3 hours + 6 hours (autonomous work) = 9 hours (total)

Total: 61 hours + 89 hours (autonomous work) = 150 hours (total)

4.3. Syllabus

Didactics of linear magnitudes and their measurement. Didactics of rational number arithmetic: models, representations and operations. The arithmetic of the rational number in the curriculum of primary education. Situations and didactic resources in the teaching of arithmetic of rational number in primary education.

These contents are organized in thematic units. In each one of them, both mathematical and didactic aspects will be worked jointly.

4.4. Course planning and calendar

The calendar of presence-based sessions, presentation of assignments and key dates is communicated through the Moodle platform (ADD) at the beginning of the semester.

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.

The dates of the final exams can be checked on the web page of the corresponding Faculty.

4.5. Bibliography and recommended resources

It can be found on the library's web page.

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=26626>