

Academic Year/course: 2022/23

63224 - Design of Learning Activities for Mathematics

Syllabus Information

Academic Year: 2022/23

Subject: 63224 - Design of Learning Activities for Mathematics

Faculty / School: 107 - Facultad de Educación

Degree: 584 -

593 -

ECTS: 8.0

Year: 1

Semester: Second semester

Subject Type: Optional

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 learning process designed for this subject is based on the following:

1. The student constructs his or her learning from his previous knowledge by incorporating the new learning provided by the teaching-learning activities. Therefore, it is important that previous ideas are made explicit and contrasted with new learning. For this purpose, we will try to create situations that make this possible, for example, debates and discussions.
2. The process of incorporation of new knowledge is not achieved only by the communication of this knowledge by teachers. It is important that the students participate actively. Therefore, class work will be oriented to the active participation of students through the reading and critical commentary of texts, design activities of teaching materials and tools, etc.
3. The construction of knowledge is a social process and this is also transferred to what happens in the learning process, hence the importance we must give to the contrast of ideas between teachers and students or among themselves.
4. Each student has his own learning process in which the doubts and difficulties that arise are his own. In this sense, the tutoring work aimed at helping each student in his or her learning process is essential.

4.2. Learning tasks

The program offers to help students to achieve the expected results includes the following activities...

- Lectures
- Active learning methodologies
- Work elaboration
- Oral presentation and discussion of papers
- Tutorials

These activities will be distinguished in this way:

Lectures in which the teaching staff will make the presentation of various didactic tools and resources, examples of methodological approaches, etc.

Interactive classes (active learning methodologies and discussion of work) in which the teacher will propose case studies, project analysis and problem solving, seeking the involvement of students through their contributions, discussion, and proposed solutions.

Carrying out activities (elaboration of works) such as readings, exercises and problem solving, design of didactic games, etc., both in the classroom or at home, but always with the guidance support of the teaching staff.

Guided practical work in individual and group tutoring sessions aimed at the realization of the assessment activities of the course.

Seminar sessions in which students will be attended to discuss specific issues related to their assignments or to try to solve any other difficulty of the students or group of students related to the subject.

Additionally, the organization of conferences or seminars with guest speakers that facilitate the acquisition of the competences of the subject will be considered.

4.3. Syllabus

1. Contexts and situations of the environment in which mathematics is used or applied.
2. Integration of problem solving in the design of mathematics learning activities.
3. The elaboration of mathematical models for concrete situations and logical-deductive reflection as an essential activity of mathematics.
4. Didactic materials for each of the different content sections.
5. Technological and audiovisual resources in the teaching-learning process of mathematics.
6. Assessment techniques.

4.4. Course planning and calendar

Calendar of face-to-face sessions and presentation of works will be made explicit in the first face-to-face sessions of the course and in the moodle platform of the subject.

4.5. Bibliography and recommended resources

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?id=11883>