

Academic Year/course: 2022/23

## 63239 - Innovation and Classroom Research in Biology and Geology

### Syllabus Information

**Academic Year:** 2022/23

**Subject:** 63239 - Innovation and Classroom Research in Biology and Geology

**Faculty / School:** 107 - Facultad de Educación

**Degree:** 584 -

595 -

**ECTS:** 4.0

**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 that has been designed for this subject is based on the argued discussion of basic theoretical aspects on innovation and research in Biology and Geology to subsequently design and analyze proposals developed by students.

Both the script of the topics covered and the specific materials of the course will be made available to students through the website of the course in the digital teaching ring of the University of Zaragoza.

#### 4.2. Learning tasks

The sessions will be face-to-face and will consist of the following activities:

Introductory presentations, by the professor, on innovation and research on Didactics of Biology and Geology and its impact on the teaching-learning process.

Analysis and discussion of proposals and concrete experiences on innovation and research lines. Reading and discussion of articles on research and innovation in Didactics of Science.

Presentations by students.

Design of innovation and research projects in Biology and Geology teaching.

The organization of conferences or seminars with guest speakers that facilitate the acquisition of the competences of the subject is contemplated.

TRAINING ACTIVITY	HOURS	ATTENDANCE (%)
Master Classes	16	100

Practical classes	24	100
Directed work	16	0
Own study	40	0
Assessment test	4	100

### **4.3. Syllabus**

- Educational innovation in science teaching (Biology and Geology).
- Analysis of different projects and discussion of innovative experiences carried out in secondary school classrooms.
- Research in Science Didactics. Qualitative and quantitative research.
- Research lines in Science Didactics (Biology and Geology).

### **4.4. Course planning and calendar**

The schedule of sessions and submission of assignments will be communicated during the first week through the ADD.

### **4.5. Bibliography and recommended resources**

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=68579&Identificador=11956>