

Academic Year/course: 2022/23

## 63232 - Innovation and Classroom Research in Informatics and Technology

### Syllabus Information

**Academic Year:** 2022/23

**Subject:** 63232 - Innovation and Classroom Research in Informatics and Technology

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

**Degree:** 584 -

594 -

**ECTS:** 4.0

**Year:** 1

**Semester:** Second semester

**Subject Type:** Optional

**Module:**

## 1. General information

## 2. Learning goals

### 2.2. Learning goals

Every student must demonstrate the next learning goals to pass this subject:

- To describe and compare recognized innovation projects in Technology and/or ICT teaching, written in Spain as well as in other countries.
- To describe teaching-learning related problems to the Technology and ICT subjects, studying the innovation project approaches to solve them, and the research models in the area.
- To analyze research articles on technology didactics or the use of ICT as support for learning improvement.
- To identify methods and basic techniques in research and innovation, both qualitative and quantitative, from the perspective of the action-research methodology.
- To design and assess innovation and research projects, taking into account all the elements of the didactic framework.

## 3. Assessment (1st and 2nd call)

## 4. Methodology, learning tasks, syllabus and resources

### 4.3. Syllabus

- Research in Computer Science and Technology Didactics and its impact in the teaching and learning process.
- Computer Science and Technology current innovation and research lines. Analysis of specific field experiences.
- Basic methods and techniques in research and innovation: Qualitative, quantitative and action-research methodologies.
- The importance of every single teacher, and the Department teaching staff, in the research and innovation workflows in ICT and Technology teaching.
- Effect of the teachers ICT and Technology conceptions and their own learning on the teaching and learning process in Secondary School.
- How to design and evaluate research and innovation projects, in the field of teaching ICT and Technology.

- The significance of teamwork in research, innovation and evaluation projects.
- Analysis and asses of the educative proposals: Methods and criteria to evaluate the educative design and the teaching practice.