Universidad Zaragoza

30007 - Fundamentals of computer studies

1.General information

1.1.Introduction

1.2.Recommendations to take this course

1.3.Context and importance of this course in the degree

1.4.Activities and key dates

2.Learning goals

2.1.Learning goals

2.2.Importance of learning goals

3.Aims of the course and competences

3.1.Aims of the course

3.2.Competences

4.Assessment (1st and 2nd call)

4.1.Assessment tasks (description of tasks, marking system and assessment criteria)

5.Methodology, learning tasks, syllabus and resources

5.1.Methodological overview
The designed learning process is based on:
1. Classic blackboard teaching.
2. Problem solving.
3. Self-studying.
4. Practical work, developing theoretical concepts.
5. The development of proposed programs of increasing difficulty.

5.2.Learning tasks

5.3.Syllabus

0. Presentation

1. Introduction - computer architecture, operating systems, networks, machine language, assembler, compilers, introduction to programming.

2. Data types - internal representation, dominion, classification, integer, real, char, boolean.

3. Composution structures - secuential, conditional iterative.

4. Behavior abstraction - procedures and functions.

5. Data abstraction - composed data types, arrays, records, strings.

6. Files - sequential, text.

5.4.Course planning and calendar

5.5.Bibliography and recommended resources