uc3m Universidad Carlos III de Madrid

Artificial Intelligence

Academic Year: (2022 / 2023) Review date: 23/05/2022 12:00:58

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: FERNANDEZ REBOLLO, FERNANDO

Type: Electives ECTS Credits: 6.0

Year: 4 Semester:

OBJECTIVES

In this course the fundamentals of Artificial Intelligence techniques will be seen from the conceptual point of view and from the practical point of view.

DESCRIPTION OF CONTENTS: PROGRAMME

- · Introduction to artificial intelligence
- · Production systems
- Search
- Reasoning under uncertainty
- · Application areas

LEARNING ACTIVITIES AND METHODOLOGY

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THEORETICAL-PRACTICAL CLASSES. Knowledge and concepts students must acquire. Student receive course notes and will have basic reference texts to facilitate following the classes and carrying out follow up work. Students partake in exercises to resolve practical problems and participate in workshops and evaluation tests, all geared towards acquiring the necessary capabilities.

TUTORING SESSIONS. Individualized attendance (individual tutoring) or in-group (group tutoring) for students with a teacher.

STUDENT INDIVIDUAL WORK OR GROUP WORK

WORKSHOPS AND LABORATORY SESSIONS

FINAL EXAM. Global assessment of knowledge, skills and capacities acquired throughout the course.

METHODOLOGIES

THEORY CLASS. Classroom presentations by the teacher with IT and audiovisual support in which the subject's main concepts are developed, while providing material and bibliography to complement student learning.

PRACTICAL CLASS. Resolution of practical cases and problem, posed by the teacher, and carried out individually or in a group.

TUTORING SESSIONS. Individualized attendance (individual tutoring sessions) or in-group (group tutoring sessions) for students with a teacher as tutor.

LABORATORY PRACTICAL SESSIONS. Applied/experimental learning/teaching in workshops and laboratories under the tutor's supervision.

ASSESSMENT SYSTEM

% end-of-term-examination/test: 60 % of continuous assessment (assignments, laboratory, practicals...): 40

SE1 - FINAL EXAM. [40 %]

Global assessment of knowledge, skills and capacities acquired throughout the course.

SE2 - CONTINUOUS EVALUATION. [60 %]

Assesses papers, projects, class presentations, debates, exercises, internships and workshops throughout the course.

BASIC BIBLIOGRAPHY

- S. Russell, P. Norvig Artificial Intelligence: A modern approach, Prentice Hall.