

Academic Year: ( 2019 / 2020 )

Review date: 26-04-2020

Department assigned to the subject:

Coordinating teacher: MOLINA LOPEZ, JOSE MANUEL

Type: Electives ECTS Credits : 3.0

Year : 1 Semester : 1

**REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)**

None

**OBJECTIVES**

Understand the concept of agent and multiagent  
 Analyze problems of agents cooperation  
 Analyze the communication needs to reach a cooperative behavior between agents  
 Design a distributed solution to a problem  
 Design execution, communication and cooperation skills to solve a real problem  
 Discuss various approaches to the development of multiagent systems  
 Knowing platforms multiagent systems development

**DESCRIPTION OF CONTENTS: PROGRAMME**

- 1.- The concept of agent. Agent architectures.
- 2.- Multi-agent system: concept and examples
- 3.- Jason: the platform and the language
- 4.- Applications in the Jason environment
- 5.- Multiagent coordination techniques
- 6.- Applications of distributed surveillance systems
- 7.- Development in Jason environment of the practice
- 8.- Autonomous Robots
- 9.- Recognition of activities
- 10.- Learning in multirobot systems
- 11.- Applications to the Robocup

**LEARNING ACTIVITIES AND METHODOLOGY**

Theoretical lectures: To achieve the specific cognitive competences of the course evaluated

Practical Case: The student proposes a project according to the teachers guidance to go deeply into some aspect of the course

The home work (theoretical and practical case) will be supervised by personalized tutoring

**ASSESSMENT SYSTEM**

The evaluation system (ordinary and extraordinary convocatory) includes the assessment of guided academic activities (final exam) and practical cases on Multiagent Systems. The work is oriented to research themes and student should do a oral presentation or a exam related to home works to be evaluated.

<b>% end-of-term-examination:</b>	50
<b>% of continuous assessment (assignments, laboratory, practicals...):</b>	50