uc3m Universidad Carlos III de Madrid

Social Robotics

Academic Year: (2022 / 2023) Review date: 14-02-2022

Department assigned to the subject: Systems Engineering and Automation Department

Coordinating teacher:

Type: Compulsory ECTS Credits: 3.0

Year: 4 Semester: 2

DESCRIPTION OF CONTENTS: PROGRAMME

- 1. Foundations of Social Robotics: What is a social robot?
- Main features of Social robots.
- 3. Hardware components of Social Robots.
- 4. Software architectures for Social Robotics.
- 5. Design principles in Social Robotics: Understanding the role of the users.
- 6. Social skills for Human-Robot Interactions through a robotic platform.
- 7. Kinds of Social Robots.
- 8. Affective Computing.
- 9. Applications of Social Robotics.
- 10. Impact on privacy and autonomy of users

LEARNING ACTIVITIES AND METHODOLOGY

THEORETICAL PRACTICAL CLASSES.

Knowledge and concepts students must acquire. Receive course notes and will have basic reference texts. Students partake in exercises to resolve practical problems.

TUTORING SESSIONS.

Individualized attendance (individual tutoring) or in-group (group tutoring) for students with a teacher. Subjects with 6 credits have 4 hours of tutoring/ 100% on- site attendance.

STUDENT INDIVIDUAL WORK OR GROUP WORK.

Subjects with 6 credits have 98 hours/0% on-site.

WORKSHOPS AND LABORATORY SESSIONS.

Subjects with 3 credits have 4 hours with 100% on-site instruction. Subjects with 6 credits have 8 hours/100% on-site instruction.

ASSESSMENT SYSTEM

FINAL EXAM.

Global assessment of knowledge, skills and capacities acquired throughout the course. The percentage of the evaluation varies for each subject between 60% and 0%.

CONTINUOUS EVALUATION.

Assesses papers, projects, class presentations, debates, exercises, internships and workshops throughout the course. The percentage of the evaluation varies for each subject between 40% and 100% of the final grade.

% end-of-term-examination: 60

% of continuous assessment (assignments, laboratory, practicals...): 40