uc3m Universidad Carlos III de Madrid

Plasmas Physics and Fusion Seminars

Academic Year: (2019/2020)

Review date: 30/05/2019 12:13:23

Department assigned to the subject: Coordinating teacher: MARTIN SOLIS, JOSE RAMON Type: Compulsory ECTS Credits : 3.0

Year : 2 Semester :

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Basic computational physics, fluid dynamics and plasma physics (at the leve of the 1st year of the master)

OBJECTIVES

The course is aimed to present to the students some of the most elevant actual areas of research in plasma physics and nuclear fusion through researchers specialists in the fields and covering a broad range of topics such as basic plasma theory, statistical physics and fusion applications, plasma turbulence, fusion technology, fusion materials, etc.

After the course, the students should have gained a multidisplicnary view of the very different areas of research and techniques involved in nuclear fusion and plasma physics research.

DESCRIPTION OF CONTENTS: PROGRAMME

- 1. Introduction to the course: Aim and methodology
- 2. Seminar topic 1
- 3. Seminar topic 2
- 4. Seminar topic 3
- 5. Seminar topic 4
- 6. Seminar topic 5
- 7. Seminar topic 6
- 8. Seminar topic 7
- 9. Seminar topic 8
- 10. Seminar topic 9
- 10. Seminar topic 9
- 11. Seminar topic 10
- 12. Seminar topic 11
- 13. Seminar topic 12
- 14. Assignment of topics to the students

LEARNING ACTIVITIES AND METHODOLOGY

The course is based on seminars (12 seminars; one per wek) on different topics given by specialists in the field. The lecturers will provide to the students

with a basic introduction to the topic, the actual status of the research in the field and basic bibliography for the students

ASSESSMENT SYSTEM

% end-of-term-examination/test:	70
% of continuous assessment (assigments, laboratory, practicals):	30

At the end of the course, a topic (among those given during the course) will be assigned to each student. The student should work on the topic (contacting with the corresponding lecture is promoted) and make a presentation in front of all the other sudents, the lecturer in charge of the topic, the coordinator of the course and other lecturers participating in the course.

% end-of-term-examination/test:	70
% of continuous assessment (assigments, laboratory, practicals):	30

Evaluation:

- * Presentation and defense of the topic (70%)
- * Participation in the seminars given by the lecturers and in the students presentations (30%)

BASIC BIBLIOGRAPHY

- Each lecturer will provide, the basic bibliography, for his topic

ADDITIONAL BIBLIOGRAPHY

- Each lecturer will provide, the complementary bibliography, for his topic