

Academic Year: (2019 / 2020)

Review date: 30-05-2019

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 level of the 1st year of the master)

OBJECTIVES

The course is aimed to present to the students some of the most relevant 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 multidisciplinary 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
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 week) 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

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 lecturer is promoted) and make a presentation in front of all the other students, the lecturer in charge of the topic, the coordinator of the course and other lecturers participating in the course.

Evaluation:

* Presentation and defense of the topic (70%)

* Participation in the seminars given by the lecturers and in the students presentations (30%)

% end-of-term-examination:	70
% of continuous assessment (assignments, laboratory, practicals...):	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