Course guides
32091 - UULL - Ultrafast and Ultraintense Laser Light

Unit in charge: Barcelona School of Telecommunications Engineering
Teaching unit: 739 - TSC - Department of Signal Theory and Communications.
Degree: DOCTORAL DEGREE IN PHOTONICS (Syllabus 2007). (Optional subject).
MASTER'S DEGREE IN PHOTONICS (Syllabus 2009). (Optional subject).
ERASMUS MUNDUS MASTER'S DEGREE IN PHOTONICS ENGINEERING, NANOPHOTONICS AND
BIOPHOTONICS (Syllabus 2010). (Optional subject).

Academic year: 2015 ECTS Credits: 2.5 Languages: English

LECTURER
Coordinating lecturer: David Artigas
Others: Jens Biegert, Carles Serrat

TEACHING METHODOLOGY
Presencial Teaching + activities

LEARNING OBJECTIVES OF THE SUBJECT
The course will give an introduction into the challenges to produce ultra-short and ultra-intense laser light as well as highlight the different physical effects and possibilities pertaining to their usage.

CONTENTS

Ultrashort laser pulse generation

(ENG) Pulse characterization and control

(ENG) Interaction of laser radiation with matter

GRADING SYSTEM
- Attend at least 80% of the lectures
- Small problem sets, depending on lecture
- Presentation of elected topic

EXAMINATION RULES.
The usual in University teaching
**BIBLIOGRAPHY**

**Basic:**