Universida_{de}Vigo

Subject Guide 2013 / 2014

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eaching	Spanish				
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oordinator	Pou Saracho, Juan María				
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Chapter 5. OPTICAL COMPONENTS AND SYSTEMS	 Spherical lenses. optical centre of a lens. Thin lenses. Ray tracing. Thin lenses coupling. Mirrors. Filters. OPtical fibers.
Chapter 6. INDUSTRIAL APPLICATIONS	 Introduction to laser materials processing Introduction to laser cutting and drilling. Introduction to laser welding. Introduction to laser marking. Introduction to laser surface treatments.

Planning			
	Class hours	Hours outside the	Total hours
		classroom	
Laboratory practises	18	30.6	48.6
Master Session	32.5	65	97.5
Long answer tests and development	1.7	0	1.7
Reports / memories of practice	1.9	0	1.9
Short answer tests	0.3	0	0.3
*The information in the planning table is for	guidance only and does no	t take into account the het	erogeneity of the students.

Methodologies	
	Description
Laboratory practises	Activities of application of the knowledge to specific situations and of acquisition of basic and practical skills related to the matter object of study. They will be developped in the laboratories of industrial applications of the lasers of the EEI.
Master Session	Exhibition on the part of the teacher of the contents on the matter object of study. Exhibition of real cases of application of the laser technology in the industry.

Assessment					
Description	Qualification				
The examination will consist of five questions of equal value. Four of them will	70				
correspond to the contents of theory and the fifth one to the contents seen in the					
laboratory practices.					
The evaluation of the laboratory practices will be carried out by means of the	20				
qualification of the corresponding practice reports.					
During the course there will be carried out a test of follow-up of the subject that will	10				
consist of two questions of equal value.					
	The examination will consist of five questions of equal value. Four of them will correspond to the contents of theory and the fifth one to the contents seen in the laboratory practices. The evaluation of the laboratory practices will be carried out by means of the qualification of the corresponding practice reports. During the course there will be carried out a test of follow-up of the subject that will				

Other comments on the Evaluation

If some student was resigning officially the continuous assessment that is carried out by means of the test of follow-up of the subject, the final note would be calculated by the following formula:

(0.8 x Exam qualification) + (0.2 x Practices qualification).

It is mandatory to carry ut the laboratory parctices in order to pass the subject.

Sources of information

UNDERSTANDING LASERS: AN ENTRY-LEVEL GUIDE. Jeff Hecht. New York, EE.UU., IEEE, 2008.

UNDERSTANDING LASER TECHNOLOGY: AN INTUITIVE INTRODUCTION TO BASIC AND ADVANCED LASER CONCEPTS, Breck

Hitz, Tulsa, EE.UU., PennWell.

LASER MATERIALS PROCESSING. W. Steen, J. Mazumder, Ed. Springer. 2010.

Recommendations