SUBJECT TEACHING GUIDE

M1717   - Models and real-time design tools

Master's Degree in computing engineering

Academic year 2021-2022

1. IDENTIFYING DATA				
Degree	Master's Degree in computing engineering		Type and Year	Optional. Year 1
Faculty	Faculty of Sciences			
Discipline	Optional Subjects			
Course unit title and code	M1717 - Models and real-time design tools			
Number of ECTS credits allocated	3	Term	Semester based (2)	
Web	http://www.istr.unican.es/asignaturas/mhdtr			
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. INGENIERÍA INFORMÁTICA Y ELECTRÓNICA
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Other lecturers	

3.1 LEARNING OUTCOMES
- To know techniques for modeling the specifications and the temporal behavior of real -time systems, and to know how to apply schedulability analysis techniques to determine whether a system will be able to meet its timing requirements.

4. OBJECTIVES
To train students to model the specifications and the temporal behavior of real -time systems, and to apply schedulability analysis techniques to determine whether a system will be able to meet its timing requirements.

6. COURSE ORGANIZATION

	CONTENTS
1	Modeling and specification of real-time systems.
2	Schedulability analysis. Schedulability analysis tools.
3	Priority assignment.
4	Specification and modeling of real-time use cases.

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Continuous evaluation	Laboratory evaluation	Yes	Yes	100,00
TOTAL				100,00

Observations
There is a single annual evaluation period. If the subject is not passed in the ordinary evaluation activities carried out in the first or the second quarters, an extraordinary evaluation will be available in the extraordinary period.

If the maximum number of highest grades ("Matricula de Honor") is reached in the ordinary evaluation period, students following the extraordinary evaluation will not be eligible to this grade. |

Observations for part-time students
Part-time students, who cannot follow the practices and continuous evaluation proposed, will be evaluated by equivalent tests to those established for the extraordinary period.

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC
- M.H. Klein, T. Ralya, B. Pollak, R. Obenza, y M. González Harbour. "A practitioner's Handbook for Real-Time Analysis".Kluwer Academic Pub., 1993.
- J.S.W.Liu. "Real Time Systems". Prentice Hall, 2000.
- MAST web page: http://mast.unican.es/
- ISTR publications page: http://www.istr.unican.es/publications.html