Course guide
330239 - ASSI - Internet Applications and Services

Last modified: 29/05/2023

Unit in charge:	Manresa School of Engineering
Teaching unit:	750 - EMIT - Department of Mining, Industrial and ICT Engineering.

Degree: BACHELOR'S DEGREE IN ICT SYSTEMS ENGINEERING (Syllabus 2010). (Compulsory subject).

Academic year: 2023 **ECTS Credits:** 6.0 **Languages:** Catalan, Spanish, English

LECTURER

Coordinating lecturer: Aguila Lopez, Francisco Del

Others:

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
1. The ability to describe, program, use, evaluate and optimize communication protocols and interfaces for the different levels of a network architecture
2. Knowledge of the main network services and their application, as well as the ability to design and implement new services.
3. Knowledge of and the ability to use existing tools and instrumentation for the analysis, design, development and verification of electronic, computer and communication systems
4. Knowledge and ability to use existing tools and instrumentation for the analysis, design, development and verification of electronic, computer and communications systems
5. The ability to perform the typical activities of the degree, taking into account the corresponding standards, rules and regulations.

Transversal:
6. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.
7. TEAMWORK - Level 3. Managing and making work groups effective. Resolving possible conflicts, valuing working with others, assessing the effectiveness of a team and presenting the final results.
8. EFFECTIVE USE OF INFORMATI0N RESOURCES - Level 3. Planning and using the information necessary for an academic assignment (a final thesis, for example) based on a critical appraisal of the information resources used.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

Type	Hours	Percentage
Hours small group	30,0	20.00
Hours large group	30,0	20.00
Self study	90,0	60.00

Total learning time: 150 h

CONTENTS

(ENG) Títol del contingut 1: LA CAPA D'APLICACIÓ

Full-or-part-time: 102h
Theory classes: 18h
Laboratory classes: 24h
Self study : 60h

(ENG) Títol del contingut 2: SEGURETAT EN ELS SERVEIS D'INTERNET

Full-or-part-time: 42h
Theory classes: 10h
Laboratory classes: 6h
Self study : 26h

(ENG) Títol del contingut 3: Network Management

Description:
1. Principles of Network Management

Full-or-part-time: 6h
Theory classes: 2h
Self study : 4h

ACTIVITIES

(ENG) TÍTOL DE L'ACTIVITAT 1: CLASSE EXPOSITIVA

Full-or-part-time: 26h
Theory classes: 26h

(ENG) TÍTOL DE L'ACTIVITAT 2: ESTUDI DE CONTINGUTS

Full-or-part-time: 20h
Self study: 20h

(ENG) TÍTOL DE L'ACTIVITAT 3: CLASSE DE LABORATORI

Full-or-part-time: 80h
Laboratory classes: 30h
Self study: 50h

(ENG) TÍTOL DE L'ACTIVITAT 5: PROVES

Full-or-part-time: 24h
Theory classes: 4h
Self study: 20h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:
- Kurose, James F. ; Ross, Keith R. Computer networking: a top-down approach [on line]. 7th ed. Boston: Pearson, 2017 [Consultation: 31/05/2022]. Available on: https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?docID=5187270. ISBN 9781292153599.

Complementary:
- Stallings, William. Comunicaciones y redes de computadores [on line]. 7ª ed. Madrid: Pearson Educación, 2004 [Consultation: 02/06/2022]. Available on: https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=1245. ISBN 8420541109.