



Course guides

230314 - HTEL - Telecommunication History

Last modified: 13/10/2016

Unit in charge: Barcelona School of Telecommunications Engineering
Teaching unit: 739 - TSC - Department of Signal Theory and Communications.

Degree: BACHELOR'S DEGREE IN TELECOMMUNICATIONS SCIENCE AND TECHNOLOGY (Syllabus 2010). (Optional subject).
BACHELOR'S DEGREE IN AUDIOVISUAL SYSTEMS ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN ELECTRONIC SYSTEMS ENGINEERING (Syllabus 2009). (Optional subject).
BACHELOR'S DEGREE IN TELECOMMUNICATIONS SYSTEMS ENGINEERING (Syllabus 2010). (Optional subject).
BACHELOR'S DEGREE IN NETWORK ENGINEERING (Syllabus 2010). (Optional subject).
BACHELOR'S DEGREE IN TELECOMMUNICATIONS TECHNOLOGIES AND SERVICES ENGINEERING (Syllabus 2015). (Optional subject).

Academic year: 2016 **ECTS Credits:** 2.0 **Languages:** Spanish

LECTURER

Coordinating lecturer: Delgado Penin, Jose Antonio

Others: Delgado Penin, Jose Antonio

PRIOR SKILLS

Ability to read and understand articles and books in English

REQUIREMENTS

To have overcome the 2nd Grade course or to be studying Third Grade course or to realize some recognized Master's degree

TEACHING METHODOLOGY

Talks for two hours (Must to be present the student). Interval of rest every hour. Oral Presentation of a document on the history of Telecommunications. Realization and delivery of a document written about the topic presented as oral Presentation.

LEARNING OBJECTIVES OF THE SUBJECT

The Seminar is transversal (History and Technology) or interdisciplinary and is divided into four different topics related with Telecommunication Services used by humankind. It explained that each service has evolved differently and in varying stages: first, there was the telegraph, then the telephone; then the radio in various forms and finally Infocomunicación (Internet Services). The sequential structure of the topics into account the presence of the Services in temporal succession related with technologies that endured / support today. Understand, acquire, understand and assimilate as much information on the most important services of Telecommunication and independently to get an overview of each: In the four topics a first objective of reaching pursued. This will involve, consider the historical / social / political situation in the development of services and who were the actors (inventors, scientists, operators, standards authorities, etc). The second objective will focus on narrow an overview of the entire sector Telecommunications considering the relationships that existed / exist between the services over time.



STUDY LOAD

Type	Hours	Percentage
Hours large group	20	40.00
Self study	30	60.00

Total learning time: 50 h

CONTENTS

TELECOMMUNICATION HISTORY

Description:

Part 0. Introduction Telecommunication History concept. An approach Scientific basis of Telecommunication: 18th and 19th centuries. Pioneers International Organizations with influence on Telecommunications Docent methodology to follow the Seminary Topics Program Bibliography Part 1. Telegraphy Optical telegraphy as first technology Electrical Telegraphic systems: National and International networks Telegraphic Services. Pioneers and relationship with your historical situation Bibliography Part 2. Telephony Premises to new technology based on ?oral telegraphy? Telephonic Electrical devices: Meucci-Bell Telephonic transmission systems: Multicarrier Telephony switching. Networking. Historical evolution Telephony Services. Evolution Pioneers and relationship with your historical situation Bibliography Part 3. Radiocommunication Introduction Scientific basis of Radio communication. Pioneers Spectrum management and Radiocom. Services Radio Systems: terrestrial and satellite history Radio networking history Pioneering activities on Radio Communication until today Bibliography Part 4. Data Networks and Internet Introduction Data transmission history Data networks form the point of view of Telecoms and Informatics Data Services evolution from Narrow to Broad bands Internet history Pioneering activities on Data Networks and Internet Bibliography

Full-or-part-time: 2 h

Theory classes: 2h

title english

Description:

content english

Full-or-part-time: 2 h

Theory classes: 2h

GRADING SYSTEM

Participation in the classroom: 25%. To be present in the classroom and interventions related to the ideas developed in the talks be considered positive. The teacher will propose activities based on texts, or documents. Work: 50%. Work in Team of two people. Each team must be a tab containing a minimum of 4 pages and Max of 6 pages (30 lines per page) on the history of a specific technology and its principal inventor/creators. Details of how to proceed indicated at the beginning of the oral and public Seminar Public talk of essay/work: 25%. Students must make a public presentation of their work using "PowerPoint" (ppt format) the last and penultimate day of the seminar (the maximum number of slides to present will be six) the details of how to proceed indicated at the beginning of the seminar.

EXAMINATION RULES.

It is mandatory indicating ETSETB



BIBLIOGRAPHY

Basic:

- Varios. Multimedia del Museo de Telefónica. Madrid: Telefonica, 2013.

Complementary:

- Bray, J. The Communications miracle: the telecommunication pioneers from Morse to the information superhighway. New York: Plenum, 1995. ISBN 0306450429.

RESOURCES

Hyperlink:

- Nombre recurso. Resource