Course Syllabi

CODE   208

NAME   Networks and Services

Credits   6 ECTS

Period   Spring Semester

Course Specifications
The course includes lectures, problem-solving sessions, individual work, and laboratory sessions.

Objectives and contents
This course provides an overview of computer networks, starting with the basics of networking, including their structure and how networks are organized.

Contents
It introduces layered models, such as the Internet models, and the standards that define network protocols and operations. The discussion of network access and link control includes the services and functionalities of the link layer, focusing on multiple access networks, local area network (LAN) technologies, and other specialized networking technologies. Network Interconnection Protocols and Internet Services cover VLANs, and IP protocols (IPv4 and IPv6), including Internet routing. It also explores transport layer services, discussing protocols like UDP and TCP, along with network programming with sockets APIs. Additionally, it presents classical Internet services such as DNS, the World Wide Web, and email among others, and advanced Internet services, such as cloud computing, multimedia, and other cutting-edge elements.

Assessment
The acquisition of concepts is evaluated considering: class attendance and participation; midterm and final exams (70% aprox.). The practical part of this course counts 30% of the final score.

Lecturer
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