Eastern Mediterranean University  
Faculty of Engineering  
Department of Electrical and Electronic Engineering

EENG412/INFE320 – Data Communications and Computer Networks

Year and Semester : 4, Fall  
Credit Hour : (4,1) 4  
Pre/Co-requisite(s) : EENG 212/INFE 212 (Algorithms & Data Structures)  
Academic Term : Fall

Catalog Description:

Prerequisite by Topic:
Algorithm design and representation. Developing and running computer programs. Student must have taken and passed the EENG112 Introduction to Programming course.

Instructor:
Prof. Dr. Dervis Z. Deniz  
Office Hours: Wed. 09:30 - 10:30  
e-mail: dervis.deniz@emu.edu.tr  
Wednesday: 13:30 – 14:30  
Tel: x1303

Lab Assistant:
Kian Jazayeri (e-mail: kian.jazayeri@cc.emu.edu.tr Tel: x 1656).

Course Web Page: http://faraday.ee.emu.edu.tr/EENG412

Textbooks:

References:

Course Objectives:
A student who successfully fulfills the course requirements will have demonstrated:

i. an understanding of data communication concepts and principles,

ii. an understanding of the layered architecture and protocols,

iii. an understanding of the interaction between hardware and software elements,
iv. an understanding of the relationship and migration between communications and computers,
v. an understanding of the use of switching systems and their development,
vi. an understanding of different network types including the Internet,

vii. an understanding of integration of services and quality of service concepts.

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**Design Component:**

- Engineering Science Credit: 2
- Engineering Design Credit: 2

**Computer Usage:**

Students have access to computer facilities in two ways: during laboratory hours and free-times. Every two students will have a separate computer and hence are expected to work as teams on computer networking problems. These will include running ready-made programs, testing, and results collection. Further they may need to develop their own programs as part of the term project. Students are encouraged to use the internet to search for various topics, including contents of similar courses offered elsewhere. Students can reach teaching/learning material, solved problems, data sheets etc. on the allocated Web sites. Students are encouraged to submit homework and lab-work using the computer network.

**Teaching Techniques:** Power point presentation/over-head projector and/or whiteboard are used in the class-rooms. Remote access to network and facilities are also desirable. Tutorials are organized to establish a closer contact with students.

**Laboratory:** Laboratory sessions are organized in parallel with theoretical study given in classrooms. Students have to complete all laboratory study/exercises and submit homework and attend quizzes.

**GRADING POLICY**

- Midterm1 : 25%
- CW(s) + Lab + (Proj.) : 35%
- Final : 40%

**N.B.:** This is a “practical” course aiming for a significant amount of programming expertise to be developed during the course. Students are expected to become fluent with computer program development which includes source code development, compilation, testing, running the programming problems. A term project may be assigned to students based on the number of students in the class. In addition, programming/networking exercises, homework and short projects will be assigned to be implemented during laboratory sessions as well as outside laboratory hours. Students are required to follow the attendance guidelines throughout the semester. NG grade will be given to students with bad exam and other evaluation results as well as low class/laboratory attendances ( < 70% attendance ).