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| | Information Network-E2 | | |
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**[                    ]**

Using the Internet for gathering information, sending e-mails, and online shopping has become a part of everyday life. In this course, students will learn the basic workings of the Internet and how computers communicate across networks. Students will also learn about information security issues and how to avoid potential problems while using the Internet.

**[        ]**

The students will learn the basics of the Internet and the various protocols used when devices communicate across the network, understand problems involving information security and how to deal with them, and learn the basic rules governing proper use of information networks.

**[                ]**

The course consists of 15 sessions (14 class sessions + 1 feedback session).
We will cover the following topics during the course, and spend one or two weeks on each topic:

1) Overview of the Internet
2) Application Layer (World Wide Web, e-mail, etc.)
3) Transport Layer (sockets, TCP and UDP)
4) Network Layer (IP addresses and routing)
5) Link Layer (LANs and Ethernet)
6) Wireless and mobile networks
7) Security
8) Rules of Internet usage

**[        ]**

No prerequisites are required, but it is recommended that the students take an introductory course such as "Basic Informatics" before this course.

**[                    ]**

Students will be expected to understand the basic workings of the Internet, information security and proper use of information networks. The student's understanding of these topics will mainly be evaluated by a final report at the end of the course. Evaluation will also be influenced by performance on practice exercises given during the course. Approximately: exercises (40%), final report (60%).

**Information Network-E2(2)**

Relevant materials will be distributed in class, so no textbook is required. However, students who wish to study the topics in more detail are recommended to read the book "Computer Networking" by J. Kurose and K. Ross (see below).

J. Kurose and K. Ross    Computer Networking: A top-down approach (7th Edition)      Pearson, 2016
ISBN:978-0133594140

Students should study material related to each topic before class, and review the course material after each class. It is also recommended that students gain first-hand experience of the topics discussed by using computers outside of class.