

## CSE 459 Internet Programming

**Instructor:** Assist. Prof. Ömer Korçak **E-mail:** [omer.korcak@marmara.edu.tr](mailto:omer.korcak@marmara.edu.tr)

**Office:** 651 **Office hours:** TBA

**Assistant:** Samet Tonyalı **E-mail:** [samet.tonyali@marmara.edu.tr](mailto:samet.tonyali@marmara.edu.tr)

**Course Description:** WWW-based applications. Design and implementation of a software architecture for connecting applications, WWW and databases. Client side and server side programming. Personalization. Network programming. Java Servlet and Java Server Pages. XML. Current trends in internet programming.

**Lecture hours:** Monday 10:30 – 12:20 (MB 555), Wednesday 10:30 – 11:20 (MB 554)

**Textbook:** “Core Web Programming”, 2nd edition, Marty Hall, Sun Microsystems Press.

**Reference:** “Unix Network Programming, The Sockets Networking API, Volumes 1, 3rd edition, W. Richard Stevens, Bill Fenner, Andrew M. Rudoff, Addison-Wesley (UNP).

**Reference:** “An Introduction to Network Programming with Java”, Jan Graba, Springer.

**Web Resources:** [www.corewebprogramming.com](http://www.corewebprogramming.com), [www.w3schools.com](http://www.w3schools.com)

### Grading (tentative):

Midterm: 20%

Programming Assignments: 40%

Presentation & Paper: 10%

Final: 30%

**Notes:** There will be 3 or 4 programming assignments. Each assignment will state whether it should be done individually or in groups. You will have roughly two weeks to complete your assignments. The assignments are to be submitted in lecture on the assigned due date. No late assignments will be accepted. There will be a research paper and presentation on a special topic on Internet programming. This will involve investigating a standard or an emerging technology, writing a short paper on it, and presenting the paper in class. Research paper and presentation will be done in pairs (unless stated otherwise).

**Academic Integrity:** Any kind of plagiarism will be strictly punished. Write everything in your own words and sentences (your own English, even if it is broken!). While writing research paper, do not cut and paste from any kind of sources (including web pages).

### Course Outline (tentative):

Introduction

Concurrent Programming with Java Threads

Socket Programming: Clients

Socket Programming: Servers

Remote Method Invocation (RMI)

Servlets

Java Server Pages (JSP)

Java Database Connectivity (JDBC)

XML Processing with Java (SAX, DOM, XSLT)

Enterprise JavaBeans

Applets

Student presentations – Special Internet technology topics