Course Information

Course Name	Network Programming
Course Number	CEN 463
Course Web Page	http://faculty.ksu.edu.sa/mdahshan/Pages/CEN463.SP09.aspx
Credit Hours	3
Instructor	Dr. Mostafa Dahshan Office: 2190 Email: mdahshan@ccis.ksu.edu.sa
Teaching Assistant	Eng. Mohammad Siraj Email: siraj@ccis.ksu.edu.sa

Tentative Course Plan

Weeks	Dates	Main Topics (Chapter Title: Sections)	Textbook Chapters
0	28/02/2008 04/03/2008	Enrollment Course Introduction	
1-3	07/03/2009 25/03/2009	**Introduction**: Layered Architecture, OSI and TCP/IP Models **Transport Layer**: TCP and UDP, Connection Establishment and Termination, Port Numbers	1, 2
4-5	28/03/2009 08/04/2009	**Socket Introduction**: Socket Address Structures, Byte Ordering and Manipulation	3
6-7	11/04/2009 22/04/2009	**Elementary TCP Sockets**: socket, connect, bind, listen, accept and close functions, fork and exec Functions	4
	25/04/2009 29/04/2009	Spring Break	
8-9	02/05/2009 13/05/2009	**TCP Client/Server Example**: Echo Server and Client **I/O Multiplexing**: The select and poll functions.	5, 6
10-11	16/05/2009 27/05/2009	**Elementary UDP Sockets**: Echo Server and Client, Lack of Flow Control, Lost Datagrams	8
12-14	30/05/2009 10/06/2009	**Name and Address Conversions**: Domain Name System and Functions **Introduction to Web Applications**: Client Side Applications, Server Side Applications, CGI, Javascript, XML	11, External References

Exam	Date	Chapters
Midterm 1	Saturday 11/04/2009	1,2,3,4
Midterm 2	Saturday 30/05/2009	4,5,6,8

Textbook

W. Richard Stevens, Bill Fenner and Andrew M. Rudoff, "Unix Network Programming, Vol. 1: The Sockets Networking API", Addison-Wesley Professional; 3 Ed., 2003.

Additional References

Beej's Guide to Network Programming Using Internet Sockets,
http://beej.us/guide/bgnet/output/html/multipage/index.html.

Evaluation

Attendance and Participation	5%
Homework and Projects	10%
Midterms	45%
Final Exam	40%

Notes

- Students must provide a valid email address for communications with the instructor.
- Syllabus is subject to change.
- Students should check the course web page periodically for important updates and announcements.
- Homework assignments are due one week after the date they are posted. One week late submission results in 50% score.
- Absence from midterm exams will result in zero score unless an excuse approved by the Vice Dean is provided.

Academic Integrity

- Homework assignments and projects must be done individually.
- You may not share your code/answers with others (looking at code is a form of sharing).
- Identical or nearly identical code/answers will result in zero score for all involved parties.