Global Learning Semesters
Course Syllabus
Course: COMP-325D Special Topics: Internet Technologies
Department: Computer Science
Host Institution: University of Nicosia, Nicosia, Cyprus

Course Summary		
Course Code	**Course Title**	**Recommended Credit Hours**
COMP-325D	Special Topics: Internet Technologies	3
Semester Offered	**Contact Hours**	**Prerequisites**
Please contact us	42-45	COMP-358, COMP-255
Department	**Level of Course**	**Language of Instruction**
Computer Science	Upper Division	English

Course Description

The course covers the following aspects of modern Internet Technologies: TCP/IP protocol suite, TCP/IP socket programming fundamentals, internet services and protocols with an emphasis on HTTP. Also course covers various WEB related technologies, development principles and methodologies, as well as programming and scripting languages and tools. In the conclusion students will be offered a critical study of current research and developments related to the WWW.

Prerequisites

COMP-358, COMP-255

Topic Areas

1. An introduction to Internet. Internet Services and Protocols. World-Wide-WEB.
2. HTTP Protocol. HTTP servers and clients (browsers).
3. WEB caching. Client site caching control. WEB Proxies.
4. Programming WEB: HTML.
5. Programming WEB: XML and custom markup languages (SGML, WML, XBRL, etc.).
6. Programming WEB: Client scripting. JavaScript, Jscript, VB Script
7. Programming the WEB: Server site scripting. CGI. Introduction to Perl. Active Server Pages (ASP).
8. Web-application development: Usability Principles
9. Web-application development: Methodologies & Evaluation
10. A survey of current research on the WWW.

Readings and Resources

Required Textbook

- Deitel, M, and Deitel, P.J. Internet and World Wide Web – How to Program, Prentice Hall, 2000, ISBN: 0-13-016143-8.

Recommended Readings

- Deitel, M, Deitel P.J and Nieto T. R E-Business & E-Commerce, Prentice Hall, 2000, ISBN: 0-13-028419-X.

- Ince, D and Freeman, A. Programming the Internet with Java, Addison Wesley, 1999, ISBN: 0-201039844-3.
- Low, D, and Hall, W. Hypermedia & the Web, John Wiley, 1999.
- Hughes, M.et al Java Network Programming, Prentice Hall, 1997.
- McLaughlin, B. and Loukides, M. Java and XML, O'Reilly Associates, 2000, ISBN: 0596000162.