

PreReq: CS4873 Networks (NOTE: Net sub. committee wants to make this one as CS3873, then the prereq will be cs3873 networks)

Title: Web design, web programming, web technologies, web engineering

Objectives: Learn basic web technologies and practice with some of these technologies to understand how the things are working in the Web.

Topics:

Applications

- Internet Applications (ftp, email, www, chat, p2p, ...)
- Distributed applications (JavaRMI, CORBA, .NET)
- Business Applications (E-commerce, ...)
- Others: web search, guest book,

Design and Layout

- Design principles, practice, software tools
- (Dreamweaver, Flash, Macromedia Shockwave, IPIX Photobubbles)

Markup Languages

- HTML, XHTML, DHTML
- CSS (cascading style sheets)
- XML, XSLT (Semantic Web Services)

Programming Languages and Technologies

- JavaScript & AJAX
- VBScript
- PHP
- C#
- Visual Basic .Net
- Perl
- Java
- ActiveX controls
- ASP and ASP.NET
- CGI
- Coldfusion

Web Servers and Server Products

- Apache and IIS (Internet Information Service) configuration
- FrontPage Server Extension
- SharePoint Team
- Databases
 - Access
 - SQL Server
 - MySQL
 - Oracle

Security

- Secure socket SSL (e.g., https)
- Authentication
- Authorization
- Encryption/decryption

Performance

- Traffic analysis

- Quality measurements

Other Issues

- Domain names, hosting, legal issues, privacy

Organizations

- WWW Consortium

- Ecma International

- IETF