

CS 546 Web Programming Syllabus

The syllabus below describes a recent offering of the course, but it may not be completely up to date. For current details about this course, please contact the course coordinator. Course coordinators are listed on the course listing for undergraduate courses and graduate courses.

Text Books

Required

Steven A. Gabarro, *Web Application Design and Implementation*, Wiley, 2006

Week-by-Week Schedule

| Week | Topics Covered | Reading | Assignments |
|------|--|-------------------|---|
| 1 | Web Fundamentals, Programming Languages for the Web | Chapters 1 and 2 | |
| 2 | HTML Basics, the working environment | Chapters 3 and 4 | |
| 3 | The PHP language | Chapter 5 and 6 | File browser v1.0, indexer v1.0 |
| 4 | More on the PHP language | Chapter 7 | |
| 5 | Using HTML with PHP, forms, sessions, cookies, etc. | Chapter 9 | File Browser v2.0, indexer v2.0 |
| 6 | Using CSS and templates. Intro to databases | Chapter 10 and 11 | |
| 7 | Database manipulation in PHP | Chapter 12 and 13 | Indexer v3.0 |
| 8 | Basics of JavaScript | Chapter 14 | Indexer v4.0+Searcher; final project proposal due |
| 9 | Programming the browser and forms with JavaScript | Chapter 15 | |
| 10 | Manipulating windows and frames with JavaScript | Chapter 16 | |
| 11 | Using dates, timers, string manipulation and regular expressions | Chapter 17 | |
| 12 | DHTML | Chapter 18 | |
| 13 | AJAX basics | | Final project CEO presentation |
| 14 | Security pitfalls and basic solutions (SQL injections, HTML/JS injections, X-site scripting, DoS, DDoS, File upload vulnerabilities, Password encryption, Password recovery flaws) | Chapters 8 and 19 | |