CSCI 366 (Database and Web Dev)
Dr. Schwartz
Review Sheet for Final

This is intended as a guideline for studying for the final… but only as a guideline. I wouldn't have covered something if I didn't think it was important. If you are wondering about a topic and you don't see it here, ask me!

Web Architectures (see Web Architecture slides on resources page of website)
- Multi-Tier (2-tier, 3-tier)
- Logical independence/physical independence
- 3-Tier architecture for web apps
- Model-View-Controller (MVC)

Internet/WWW
- Protocols (TCP, HTTP)
- Functionality of web servers and browsers
- DNS and URLs

HTML
- Basic elements (Images, Links, headings, paragraphs, quotes,…)
- Block vs inline elements
- Lists, Tables, favicons

CSS
- Separation of content from formatting
- CSS rule format
- Priority of stylesheets (embedded, internal, external)
- Basic CSS properties
- Grouping and selecting elements (context selectors, etc.)
- Classes vs IDs and when to use each
- Box model (border, padding, margins)
- Alignment, floating
- Positioning (relative, fixed, absolute)

PHP
- Understanding how PHP and HTML interact
- The "life cycle" of a PHP web request
- Basic syntax
- Embedded PHP, expression blocks
- Arrays (explode/implode, slice, etc.), associative
- Page parameters (_GET, _POST arrays), query strings
- File I/O and directory scanning
- PHP Forms
- PDO basics
  - why is it preferred
  - how does it work
  - basic syntax/functions
  - fetch vs fetchAll, modes

Web Services
- What are they? What can they be written in? Why use them?
- How does the communication work?
- Get vs Post
- MIME types (JSON, XML, etc)

JavaScript
- Client-side programming vs server-side, concept and pros and cons
- Syntax basics
- Event-driven programming and event handlers
- DOM/jQuery
  - Concept
  - Traversal
  - Selecting elements
  - Modifying the DOM

Ajax
- Concept
- Uses

Cookies and Sessions
- Concepts
- Uses
- Types of cookies
- Cookies vs Sessions

Types of Questions
- Short answer
- Multiple choice
- Matching
- True/false
- Write HTML/CSS/PHP code segments
- Given a code segment (HTML/CSS/PHP/JavaScript/jQuery), what does it produce?