**CS 315 Final Exam Terms and Concepts**

Last Modified: 28 April 2022

This will be a comprehensive final exam, with about ⅓ of the material coming from earlier work in the semester and ⅔ from material since the last test. For the material from earlier in the semester, the focus will be on the concepts of the DOM, interactions of JS with the DOM and with programs on the server, what is on the server vs what is on the local browser, and the tension between the stateless nature of the web and the desire to have stateful web applications.

You should know about or be able to do the following new material:

* SQL syntax for creating a table and inserting values into a table
* use PHP to insert rows into, delete rows from, and update rows in a MySQL table
* SQL queries that join two or three tables
* the use of each of the clauses of a select statement:
  + from
  + where
  + group by
  + having
  + order by
  + limit
* using AJAX to interact with a database, via PHP programs
* cookies in HTTP, including the PHPSESSID cookie
* the PHP functions involved with creating, managing, and destroying sessions
* the use of the PHP $\_SESSION array
* attack strategies and some of the ways to mitigate them
* what the acronym REST stands for