Syllabus CSCI 342, Web Scripting, Fall 2016

• Instructor: Geoffrey Matthews, x3797, geoffrey dot matthews at www dot edu

• Office hours: MTWF 10:00, CF 469

• Text:

- Web Programming Step by Step: http://www.webstepbook.com/

- Other online readings as assigned.

• Webpage: www.instructure.com: homework assignments, grades

• Repository: https://github.com/geofmatthews/csci342: handouts, lectures, code

• Lectures: CF023, MTWF 11:00

- Content: We will study the development of programs and scripts for Web server applications and implement dynamic web pages in the Unix and Windows environments. The course will include a study of various scripting languages, and database access through database management systems. Implementations will be using a variety of languages (possibly including PHP, Python, Ruby, Javascript and others), their database interfaces and a simple SQL database management system.
- Course goals: After successfully completing this course, students will be able to:
 - 1. have an understanding of what scripting languages can do and how they are used to develop Web applications
 - 2. demonstrate a working knowledge of a variety of scripting languages.
 - 3. have a complete understanding of Web concepts and technologies such as HTTP protocol, CGI, database connectivity, security AJAX and XML
 - 4. have a working knowledge of the design and development of web based applications using a number of tools and strategies
 - 5. have the ability to use of databases as data repositories for web applications
 - 6. implement a number of tools and technologies used today to develop modern web applications
- Software: The software we develop will require both scripts that run in web browsers and scripts that run in web servers. You already have a browser, but it will be convenient to have your own server, as well.

You may already have this on your system, but if not you should install on your laptop (or on a portable disk or thumb drive) a copy of XAMPP: https://www.apachefriends.org/index.html. This will install an Apache web server complete with PHP, Perl, and MariaDB (similar to MySQL). We will discuss how to get other languages/environments running later.

- Exams: One midterm and one final. You may bring two double-sided pages of notes to use during the exams.
- Homework: Homework assignments will be passed out regularly through the quarter, generally involving the creation of a web site. Homework will be due at midnight on the due date. Late work is accepted at a penalty of 25% per each fraction of 24 hours late. There may be an assignment due during dead week.
- Grading:

$$0 \le F < 60 \le D < 70 \le C < 80 \le B < 90 \le A$$

Homework	Midterm	Final
50%	20%	30%

• Academic dishonesty: Academic dishonesty policy and procedure is discussed in the University Catalog, Appendix D. All students should read this section of the catalog. Academic dishonesty consists of misrepresentation by deception or other fraudulent means. In computer science courses this frequently takes the form of copying another's program, either a fellow student's program, or copying one from the web. Due diligence should be exercised in the labs at all times, since both copying and letting someone else copy your program are equally culpable. Do not walk away from your computer in the lab without logging out or locking the screen. Do not share files, even if it is just to "show them something." Describe it in words, or talk to them in person, never share code.

- Collaboration: Collaboration with your fellow students is a good way to learn. Feel free to share ideas, solve problems, and discuss your programs with other students. However, collaboration is *not* copying. All code should be original. Remember the Simpson's Rule: after discussing homework with another student, each of you must destroy all written notes, pictures, files, *etc.* that you shared. After that, you must watch a rerun of *the Simpson's*, or do something else unrelated, for half an hour. Then you can take the knowledge you gained from another student and put it to work, since it is now not copying, but learning. You have made it your own.
- **Approximate Schedule:** The following schedule may be adjusted radically depending on interests and problems as they occur.

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September 2016
Su Mo Tu We Th Fr Sa
18 19 20 21 22 23 24
                     Chapters 1-4
    October 2016
25 26 27 28 29 30
                      Chapters 5-6
                 1
 2 3 4 5 6 7
                  8
                      Chapters 7-8
 9 10 11 12 13 14 15
                      Chapters 9-10
16 17 18 19 20 21 22
                      Chapters 11-12
23 24 25 26 27 28 29
                      Review and Catchup, Midterm Friday October 28
   November 2016
         2 3 4 5
                      Chapters 13-14
 6 7
      8 9 10 11 12
                      Chapters 15-16
13 14 15 16 17 18 19
                      Ruby on Rails?
                     NodeJS? Django?
20 21 22 23 24 25 26
  December 2016
27 28 29 30
            1
                     Review and Catchup
               2
                  3
        7
               9 10
                     Final Wednesday December 7 8:00am
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