### **Svllabus**

Internet Development – COMP/CENG 250 2:00 MWF – Science 207 Spring 2014

Instructor: Dr. Frank McCown

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Home Page: http://www.harding.edu/fmccown/classes/comp250-s14/ (Syllabus, useful links)

Office Hours: Science 208: 11 – 12 MW, 2 – 5 TR, 11 – 12 and 3 – 4 F, or by appointment

## **Course Description**

This course will cover a wide variety of topics dealing with Internet development including HTTP, HTML5, cascading style sheets, JavaScript, PHP, and MySQL. The Apache web server and Linux OS will be the primarily platform used. Prerequisite: COMP 170 or 150/151.

Required textbook: Internet and World Wide Web Programming, 5th Ed by Deitel and Deitel (2012)

#### **Attendance**

You are expected to be in class every day. Attendance will not be taken, but it is definitely to your advantage to be present every day. If you are absent, you should check Easel for missing notes and homework assignments, and talk to a friend about anything else you may have missed. You are still expected to take any quizzes that are assigned. Late work will be assessed a penalty unless your absence is excused.

#### **Exams**

There will be three regular exams and a comprehensive final exam that will also include all material covered after the third exam. If for **any** reason you are not able to take an exam, you must notify me **before** the exam (or as soon as you are physically possible). Failure to do so may result in a **zero** for the exam. Makeup exams for excused absences will be given, but a penalty of up to 75% will apply for unexcused absences, at the teacher's discretion. If an official school function takes you out of class on an exam date, it is your responsibility to make arrangements one week prior to the exam as to when you will take the exam. Usually it will be given early, not late.

## Homework Assignments, Quizzes, and Projects

Homework assignments, quizzes, and projects will be assigned throughout the semester. Most work is *individual* work; only the big projects may be completed in pairs. Quizzes are over the reading assignments and will be taken using Canvas. Quizzes must be taken *before* class on the due date and may not be taken later. You may use your text while you are taking the quiz, but you may not take the quiz with someone else or talk to someone else about the quiz before you take it.

There will be three large projects that will involve a significant amount of effort. The projects will require you to integrate all of the things you have learned and will demonstrate your mastery of the material. You may work independently on all projects or in pairs (two people only) when permission is given. Pair programming has been shown to have a number of benefits including increased personal satisfaction and fewer errors<sup>1</sup>. If you work in pairs, both of you must work together on a *single* computer, and both of you must write *approximately half* of the code. **No code can be written without the other partner present and watching.** Both of you should understand completely what is being written since you will have to complete your exams individually. When you submit a program to Easel that has been written in pairs, you must put comments in your code indicating the names of both programmers. Only one student needs to submit their solution to Easel.

<sup>&</sup>lt;sup>1</sup> See All I Really Need to Know about Pair Programming I Learned in Kindergarten (2000) for more information on effectively using pair programming.

#### Extra Credit

A maximum of 2% extra credit can be earned and applied to your final grade.

- 1. Computing Seminars: You will receive **0.1%** points extra credit to be added to your final grade for each Computing Seminar that you attend. Seminar meets every Friday at 7:00 am and sometimes on Thursdays at 4:00 pm in Science 113. The first seminar will begin around the 3<sup>rd</sup> week of the semester. There will be approximately 15 seminars, thus allowing you to increase your final grade by 1.5%. See http://www.harding.edu/comp/calendar.html for the complete schedule.
- 2. Giving blood: Donating at the Red Cross blood drives will earn you **0.2%** added to your final grade each time you donate. Donate as many times as you'd like, and give me a signed note confirming your donation each time you donate.
- 3. The McChallenge: 1% will be added to your final grade for the completion of extra work on a project which will be made available to you later in the semester. The program will be due the last day of class. You can skip the project and still get the 1% added to your final grade if you defeat me in a game of basketball, tennis, racquetball, Halo, chess, Trivia Pursuit, or any other sport/game that I know how to play. If you lose, you may still complete the extra project work to get your 1%. Only one challenge per semester, and no challenges the final week of class. Come by my office to schedule a time to play.

#### Grades

Final grades will be computed as follows: Standard letter grades: A = 90-100%, B = 80-89% C = 70-79%, D = 60-69%, F = 0-59%

Exams:	30%	Late work: A maximum of 10% will be taken off each day (including weekends) an
Projects:	30%	assignment is late, up to 50%. Nothing late more than 1 week will be accepted. Those
Homework & Quizzes:	20%	with excused absences are still expected to turn in assignments as soon as you are
Final Exam:	20%	physically capable of doing so.

Final grades are not rounded unless the student has given significant effort which is evidenced by regular attendance, completion of nearly all homework assignments, significant effort on projects, etc.

#### Miscellaneous

- 1. Notes for each day are available to you on Easel. If you want to print them out, please do so before class so you don't disrupt others.
- 2. To be successful in this course, be prepared to spend at least two hours outside of class for every hour in class studying, reading, completing quizzes and homework, working on projects, and preparing for exams. This works out to about 9 hours a week. If you do not have this much time to dedicate to the course, you should take it some other semester when you can make that commitment.
- 3. It is important that you **check your e-mail regularly (everyday)** because I occasionally give hints or corrections to homework assignments via e-mail. This is also the best way to communicate with the class outside of the classroom.
- 4. I expect every one of you to hold to the highest standard of personal conduct and integrity. Cheating in all its forms is inconsistent with Christian faith and practice and will result in sanctions up to and including dismissal from the class with a failing grade. Homework assignments and quizzes are individual assignments and are to be completed individually. Only the projects can be written in pairs. It is considered cheating if you submit work performed by anyone but yourself. Come by during office hours (or we'll arrange a time) for assistance on assignments. Also take advantage of the tutor in 201 who will be available throughout the week.
- Please adhere to the dress code as spelled out in the Student Handbook. This includes men removing caps while in class. Please wear shoes to class (flip flops are OK).
- 6. There is no food or drink permitted in the lab. This is expensive equipment and carpet that is easily spoiled by an accident.
- 7. Lab computers may be used during class to **take notes and write programs**. They may not be used for any other purpose including email, surfing the Web, Facebook, games, etc. Students who break this rule will not be allowed to use the lab computers.
- 8. Silence your phones, and put them away. It is very distracting to me and those around you when you text in class.

This course covers a wide array of material. Be prepared to devote a significant amount of time in order to master the concepts that will be covered. Students who do the best in this course attend class regularly, turn in homework and assignments on time (because they don't

procrastinate), and seek help from the tutor or myself when in a rut. Remember that I am here to help you.

#### **Assessment**

Harding University, since its charter in 1924, has been strongly committed to providing the best resources and environment for the teaching-learning process. The board, administration, faculty, and staff are wholeheartedly committed to full compliance with all criteria of the Higher Learning Commission of the North Central Association of Colleges and Schools. The university values continuous, rigorous assessment at every level for its potential to improve student learning and achievement and for its centrality in fulfilling the stated mission of Harding. Thus, a comprehensive assessment program has been developed that includes both the Academic units and the Administrative and Educational Support (AES) units. Specifically, all academic units will be assessed in reference to the following Expanded Statement of Institutional Purpose: The University provides programs that enable students to acquire essential knowledge, skills, and dispositions in their academic disciplines for successful careers, advanced studies, and servant leadership.

# Students with Disabilities

It is the policy for Harding University to accommodate students with disabilities, pursuant to federal and state law. Therefore, any student with a *documented disability* condition (e.g. physical, learning, psychological, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the instructor and the Disabilities Office at the *beginning* of each semester. (If the diagnosis of the disability occurs during the academic year, the student must self-identify with the Disabilities Director *as soon as possible* in order to get academic accommodations in place for the remainder of the semester.) The Disabilities Office is located in Room 205 of the Student Center, telephone, (501) 279-4019.

#### Schedule

The following schedule is subject to change but gives you an idea of how the class will progress:

Introduction Internet and Web history and terminology	Week 6	JavaScript objects Debugging	Week 12 Apr 7	MySQL and SQL Exam 3
	Week 7	Event handling	Week 13	Accessing MySQL with PHP
<i>MLK Day – No class</i> HTTP		DOM, timers, canvas Project 2 – JavaScript		Project 3 – PHP application
Intro to HTML5			Week 14	User authentication
	Week 8	Audio and video		Uploading files
Links, images Lists, tables, misc.	Mar 3	Exam 2		Web services
Taz - Linux Project 1 – Web Site	Spring Break		Week 15	Web search engines Mobile web development
	Week 9	Intro to PHP		
Cascading Style Sheets			Week 16	Final Exam
Exam 1	Week 10	Submitting form data Ajax	May 5	
HTML forms Intro to JavaScript	Week 11	Cookies & session variables	"Whatever you do do it all to the glory of God." $-1$ Cor 10:31	
	Internet and Web history and terminology  MLK Day – No class HTTP Intro to HTML5  Links, images Lists, tables, misc. Taz - Linux Project 1 – Web Site  Cascading Style Sheets Exam 1  HTML forms	Internet and Web history and terminology  Week 7  MLK Day – No class HTTP Intro to HTML5  Week 8  Links, images Lists, tables, misc.  Taz - Linux Project 1 – Web Site  Cascading Style Sheets Exam 1  Week 10  HTML forms	Internet and Web history and terminology  Week 7 Event handling  DOM, timers, canvas  Project 2 – JavaScript  Intro to HTML5  Week 8 Audio and video  Links, images Lists, tables, misc.  Taz - Linux  Project 1 – Web Site  Week 9 Intro to PHP  Cascading Style Sheets  Exam 1 Week 10 Submitting form data  Ajax  HTML forms	Internet and Web history and terminology  Week 7 Event handling Week 13  MLK Day – No class HTTP Project 2 – JavaScript Intro to HTML5 Week 8 Audio and video  Links, images Mar 3 Exam 2  Lists, tables, misc.  Taz - Linux Spring Break Week 15  Project 1 – Web Site  Week 9 Intro to PHP  Cascading Style Sheets Exam 1 Week 10 Submitting form data Ajax  HTML forms  Apr 7  Apr 4  Apr 8  Apr 7  Apr 4  Apr 4  Apr 7  Apr 4  Apr