Syllabus
Internet Development – COMP/CENG 250
11:00 Mon, Wed, Fri – Science 207
Spring 2011

Instructor: Dr. Frank McCown

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Home Page: http://www.harding.edu/fmccown/classes/comp250-s11/ (Syllabus, useful links)

Office Hours: Science 208: 3 – 5 MWF, 10 – 11 & 1 – 2 TR, or by appointment

Course Description

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

Required textbook: *Internet and World Wide Web Programming, 4nd Ed* by Deitel and Deitel (2007)

Exams

There will be three regular exams (100 points each), and a final comprehensive exam (150 points) 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 will result in a ***zero*** for the exam. A message on voice mail is preferred. 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. Homework and quizzes will be 10 points each. All quizzes will be taken using Moddle. You will need to take each quiz before class on the due date. No make-up quizzes will be given. 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 100 point projects. These are major assignments requiring a significant amount of work. 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[1]. 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 program.

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 need to get the notes from a friend and get any handouts that you missed from me. You are still expected to take any quizzes that are assigned. I will not redo a lecture for someone missing class although I'd be happy to explain things further to you during scheduled office hours. Late work will be assigned a penalty unless your absence is excused.

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[1] See *All I Really Need to Know about Pair Programming I Learned in Kindergarten* (2000) for more information on effectively using pair programming at http://citeseer.ist.psu.edu/williams00all.html.

Extra Credit

You will receive **0.1%** points extra credit to be added to your final grade for each Computer Seminar that you attend. Seminar meets every Friday at 7:00 am and sometimes on Thursdays at 4:00 pm in Science 100. The first seminar will begin around the 3rd 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.

The McChallenge: 1% will be added to your final grade for the completion of an extra 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 project to get your 1%. Only one challenge per semester, and no challenges the last week of class (I'm too busy that week for challenges). Come by my office to schedule a time to play.

Grades

Standard letter grades: A = 90-100%, B = 80-89% C = 70-79%, D = 60-69%, F = 0-59%

Final grades will be computed as follows:

Exams:	30%
Projects:	30%
Homework and Quizzes:	20%
Final Exam:	20%

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

Expectations

1. 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.

2. 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 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 several times a week.

3. I expect you to 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).

4. There is **no food or drink** permitted in the lab. This is expensive equipment and carpet that is easily spoiled by an accident.

5. Lab computers may be used during class to **take notes and write programs**. They may not be used for any other purpose including instant messaging, e-mail, surfing the Web, Facebook, games, etc. Students who break this rule will not be allowed to use the lab computers.

6. Silence your cell phones.

If you ever need assistance in this class or anything else, please don't hesitate to come by my office or give me a call.

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.

Assessment of the knowledge, skills, and dispositions of each student for the purpose of assigning a letter grade at the completion of this course will be based on the projects, quizzes, homework assignments, and exams that were described previously in this syllabus. Near the completion of your major in the department of Computer Science, you will be assessed by a comprehensive examination covering core courses in your major, including this course. This examination will influence your final grade in the senior capstone course.

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 102 of the Lee Academic Center, telephone, (501) 279-4019.

Schedule

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

Week 1 (Jan 17)	Introduction Internet and Web history and terminology	Week 9	Misc. CGI topics
		Week 10	PHP: Hypertext Preprocessor (PHP)
Week 2	HTTP and HTML Linux and commands	Week 11	PHP syntax review Submitting form data
Week 3	Web graphics Tables Project 1 – Web Site	Week 12 (Apr 11)	Cookies and session variables **Exam 3**
Week 4 (Feb 7)	Cascading Style Sheets (CSS) **Exam 1**	Week 13	MySQL and SQL Accessing MySQL with PHP Project 3 – PHP application
Week 5	Web search engines Intro to JavaScript	Week 14	Password hashing Uploading files Web services
Week 6	DOM and advanced JavaScript AJAX		
Week 7	CGI programming with C++ Form processing with CGI	Week 15	Overview of Java applets, Flash, Silverlight
		Week 16	**Final Exam**
Week 8 (Mar 7)	Project 2 – CGI application **Exam 2**		
Spring Break			

"Whatever you do . . . do all to the glory of God." - 1 Corinthians 10:31