Syllabus

Internet Development – COMP/CENG 250 2:30 – 3:45 Tues/Thurs Science 207 Fall 2008

Instructor:Dr. Frank McCownContact:501-279-4826, HU Box 10764, fmccown@harding.eduHome Page:http://www.harding.edu/fmccown/classes/comp250-f08/ (Syllabus, useful links)Office Hours:Science 208: 11 – 12, 1 – 3 MWF, 4 – 5 TR or by appointment

Course Description

This course will cover a wide variety of topics dealing with Internet development including HTML, cascading style sheets, JavaScript, DHTML, CGI programming with C++, and PHP development. The Linux platform will be used. Prerequisite: COMP 170 or 150/151.

Required textbook: *Internet and World Wide Web Programming*, 4^{nd} Ed by Deitel and Deitel (2007) Optional textbook: *PHP Bible*, 2^{nd} Ed by Tim Converse and Joyce Park (Wiley – 2002)

Exams

There will be two regular exams (100 points each), and a final comprehensive exam (150 points) that will also include all material covered after the second 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 Blackboard at http://elearning.harding.edu/. 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 at least 6 hours 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). Pair programming has been shown to have a number of benefits including increased personal satisfaction and fewer errors¹. 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 that has been written in pairs, you must include a printed log listing the dates and times you and your partner met to write the program. If you fail to provide a log or turn in a program that is nearly identical as someone else's will be considered cheating.

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

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.

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.

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, chess, Trivia Pursuit, or any other sport/game that I know how to play. If you lose, you've still got to complete the project to get your 1%. Only one challenge per semester. 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%. Those with excused absences are still expected to turn in assignments as soon as you are physically capable of doing so.

Important! Keep all of your programs, homework, etc. so if a grade gets marked down incorrectly, the mistake will be easily resolved.

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... that means you will not cheat on tests or programs. Cheating may result in you being dropped from the class with an F. That doesn't mean you can't help others with their programs; everyone will at some time struggle and need assistance from fellow students. But simply giving someone your source code to copy isn't going to help either of you. Warning: Students who "work together" (write one program and each make a copy) on a homework or lab are in danger of having one grade divided between them. Homework and labs are individual assignments and are the responsibility of the individual. Only the projects can be written in pairs. Come by during office hours (or we'll arrange a time) for assistance on programs. Also take advantage of the tutor 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.
- 4. There is no food or drink prohibited in the lab. This is expensive equipment and carpeting 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.

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	Introduction Internet history and Web background	Week 9	Misc. CGI topics
		Week 10	Exam 2
Week 2	Intro to HTML		PHP: Hypertext Preprocessor (PHP)
	Intro to Linux and commands		
		Week 11	PHP syntax review
Week 3	Web graphics		Submitting form data
	Tables & frames		
		Week 12	Maintaining state and session variables
Week 4	Project 1 – Web Site		Project 3 – PHP application
	Cascading Style Sheets (CSS)		
		Week 13	MySQL and SQL
Week 5	Exam 1		Accessing MySQL with PHP
	Intro to JavaScript		
		Thanksgiving Break	
Week 6	DHTML, DOM, and advanced JavaScript		
		Week 14	Misc. PHP topics
Week 7	CGI programming with C++		
	Form processing with CGI	Week 15	XML and XHTML
			Overview of Java applets, Flash, AJAX
Week 8	Project 2 – CGI application		
	More CGI applications	Week 16	Final Exam

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