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CGT 141/C&IT 141 Internet Foundations, Technologies, and Development

http://www2.tech.purdue.edu/cgt/courses/cgt141

Fall 2008

CGT 141/C&IT 141 - Internet Foundations, Technologies, and Development.

Class 2, lab. 2, cr. 3.

Prerequisite: PC literacy or CIT 135 or CIT 136

This course explores the history, architecture and development of the World Wide Web. Current tagging and scripting languages are covered in a tool independent environment. Topics also include authoring tools, design, graphic and multimedia formats, and commerce, implementation and security issues.

Prerequisites: PC literacy or CIT 135 or CIT 136

Course Supervisor: Professor R.J. Glotzbach Office: 319 Knoy Hall of Technology

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Course Learning Outcomes

Upon completion of CGT 141 / CIT 141, students will be able to:

- 1. Use the HTML language and its more stringent counterpart xHTML, and use it to develop materials for the web.
- 2. Demonstrate an understanding of raster graphics formats for the web and use them within web pages.
- 3. Apply proven methods for information architecture focused upon audience, content, and delivery.
- 4. Demonstrate an understanding of the effect of the server on design, implementation and delivery, and how the browser and display affect web designs and materials.
- 5. Incorporate tables, frames, forms, audio, video and vector components on the web.
- 6. Use client-side scripting to extend the capabilities of HTML and XHTML.
- 7. Identify differences between extended technologies such as VBScript, CSS, DHTML, XHTML, XML and XSL, WML, WAP, XAML, and how they differ from HTML.
- 8. Show understanding of the legal and ethical implications of publishing on the web.

Weekly Topics

(The weekly topics are subject to change at any time by the course administrator. For the most up to date weekly topics, see the course website.)

Week	Lecture	Lecture	Lab
Week 1	Introduction to the	Overview of HTML,	Exercise 1 - Cool/Suck
	Course and the Web	xHTML and history	Sites
Week 2	The Browser, Display	Review of Structural	Exercise 2-Formatting
	and Web Design	and Formatting Tags	Documents
Week 3	Media Design and	Images: JPG, GIF,	Exercise 3-Images
	Development	aGIF, & PNG	
Week 4	Information	Links, Links and more	Exercise 4-Links
	Architecture	Links!	Project 1
Week 5	Server Environments	Tables: Assistance for	Exercise 5-Tables
		Formatting	Exercise 6-Tables
			Project 1
Week 6	Limitations of the Web:	Forms and Data	Exercise 7-Forms
	Bandwidth	Submission	Project 1
Week 7	Understanding the	Midterm Exam	Project 1
	Frames Paradigm		
Week 8	Frames Documents	Applets, Embeds and	Project 1

		Objects	
Week 9	Exam Q&A	CSS Level 1	Project 2
Week 10	CSS Level 1	CSS Level 1	Exercise 8-Internal CSS
			Exercise 9-Internal CSS
			Exercise 10-Ext. CSS
			Project 2
Week 11	JavaScript: An	JavaScript: Objects,	Exercise 11-JS
	Introduction	Properties and Methods	Exercise 12-JS
			Project 2
Week 12	JavaScript: Events,	User Enhancements	Project 2
	Values and Variables	with JavaScript	
Week 13	VBScript: A Contrast	DHTML – Combining	Project 3
	WAP & WML	Technologies	_
Week 14	Wellformedness and	Working with XML &	Project 3
	Validity: An XML	XSL	_
	Introduction	Intro to ASP	
	PHP		
Week 15	Emerging Tech	Exam Review	Project 3 Due
Week 16	Final Exam		

Course Assignments

Exercises

Throughout the course you will be required to work through the specific xHTML, CSS and other exercises. The exercises are designed to help familiarize you with these "languages." Each tutorial contains specific tasks to help you get over the learning curve of using it. You are expected to create these exercises by hard coding -- not with a page or site editor.

Projects

You will be expected to successfully complete two projects. The first project will require you to use xHTML and will be a multiple page, frames site. The second project, will be a site (content of your choosing, but a self promotional site is usually most effective), that uses xHTML, CSS and Javascript. Projects will be graded on professionalism, execution, creativity, technical merit, aesthetic value, and communicative value. See the weekly layout for more information concerning the projects.

Quizzes

Throughout the course, quizzes will be given and used to take attendance during lecture. The quizzes will not be announced and they will cover material from previous lectures. If you happen to miss a quiz, you will be counted abscent for that lecture. See the attendance policy for more information about abscenses.

Exams

The midterm exam will cover material from the book(s), lecture, demonstrations, laboratory, and project portions of the course and be administered during the lecture time period. The final exam will be a cumulative and comprehensive exam and given at the appropriately scheduled time.

Evaluation

Activity	Percentages*
Exercises & Quizzes	20%
Project 1	20%
Project 2	20%
Midterm Exam	20%
Final Exam	<u>20%</u>
Total	100%

^{*}Regardless of the above percentages, any student who completes less than 80% of the assignments will receive an F for the course.

Grading Scale

This course assigns grades as A, B, C, D, F. The +/- system is not used in this course.

90-100 %	Α
80-89 %	В
70-79 %	C
60-69 %	D
0-59 %	F

Grading Philosophy

Superior work, professional	A
Above average student work	В
Average student work	C
Below average student work	D
Failure	F

Texts (Required):

Neiderst Robbins, J. (2006). Web Design in a Nutshell, 3rd Edition, O'Reilly, ISBN 0596009879.

Recommended Texts:

• Goodman, D. (2004). The Javascript Bible 5th Edition, IDG, ISBN 0764557432.

Supplies

- Several CD-R disks
- Three-ring binder (or other personal management aid)
- 1 Itoya Presentation/ Display Book for submitting assignments
 - Make sure it is 8 1/2" x 11" with at least 12 sleeves (they come in other variations)
- CD Label kit
- Self-adhesive Plastic CD disk holder (for project submission)
- Markers or color pencils (as needed)

Course Administration

• Lecture and Demonstration

Lectures will concern the body of knowledge surrounding hypermedia production. The demonstrations will cover specific operations and techniques. You are expected to be at both of these (see Excused Absenses below). If you have to miss a lecture or a demonstration, permission for an excused absence must be granted by the professor before the lecture or demo. It is your responsibility to secure all materials and information presented in lecture or demo, even with an

excused absence. Lectures and demonstrations will not be repeated. Lectures or demonstrations may be tape recorded with the professor's permission.

• Excused Absences

You must clear any absence beforehand with the instructor and the instructor will require documentation before the absence is excused. Absences due to illness or other circumstances beyond your control will be handled on a case-by-case basis and will require documentation. Note:

- Attendance will be taken using unannounced quizzes throughout the semester.
- A class is defined as one (1) lecture, one (1) demonstration or one (1) lab.
- Quizzes will be used for attendances. The number of quizzes missed indicates the number of absenses.
- You may have 3 absences (excused or unexcused) from class without affecting your semester grade (no questions asked).
- Upon the 4th absence from class your final semester letter grade will be reduced by one letter grade.
- Upon the 5th absence you will automatically fail the course.
- Extenuating circumstances will be handled on a case-by-case basis. A case will only be considered "extenuating" if the student has contacted the Office of the Dean of Students and requested an explanation of absence be sent to Professor Glotzbach.

• Philosophy

As a student in a college course you will often be expected to do original analyses of your work and that of others - your peers and recognized professionals. Your ability to plan, evaluate, and critically analyze project goals, guidelines, and problems to create a unique, self-generated solution is a central activity of this course. You will be expected to attend class and laboratory sessions and to turn in assigned work on time. Late work will not be accepted. Failure to do so demonstrates a lack of readiness to handle independent work and may call for individual counseling, loss of course points, or failure.

Outside Work

Outside work will be necessary. Prepatory sketches should be done outside of class. You will not be able to complete the assignments if you work only in class. Files can be passed back and forth between Mac and PC as long as (a) you use a PC disk, and (b) use correct PC 8.3 (ISO 9660 Level 1) file extensions

• File Security & Disks

You are responsible for the security of your files. Period. You should have multiple copies on multiple sources (disks, Zip, TCN server, ITaP server) at all times. Given a faulty diskette or other media, the instructor will assist you in attempting to recover lost files. However, ultimately you are responsible for maintaining your digital data. Loss of data, files, or other associated items needed for a project will require that you recreate your work, with no exceptions.

Student Conduct and Policies

- The <u>Purdue University Student Conduct Code</u> must be followed.
- No swearing, or derogatory comments about, or towards, any member of the class will be tolerated in any class period.
- Where any type of assignment for this course is concerned, no sexual or sexually suggestive content will be tolerated. No alcohol or drug related sites will be tolerated. No scantily clad or nude people will be tolerated. In general, no inappropriate content will be tolerated. Any of these violations will result in a zero(0) on that exercise, lab, project, exam, or other assignment. Serious violations could result in the student being sent to the Dean of Students. Your work should be something you would be happy to show to your Department Head or the Dean of the School.
- No food or drinks of any kind will be allowed in any lab sessions.
- Students are expected to arrive on time for all class and lab sessions.
- Standards set by Purdue University as outlined in the Student Handbook and the University Regulations (1996-1997) will be observed in this course. Students are expected to be present at each and every meeting of the class. In the event that a student must miss a class period, they must inform the supervising instructor of the course of their absence and NOT a teaching assistant (TA).

Should the student not be able to reach the instructor they are to leave a message for him/her at their office with the secretary. Should circumstances not allow this, the student may contact the Dean of Students Office and explain their emergency. The Dean's office will then pass the word along to each of the student's professors for them. Upon your return to Purdue, contact the supervising instructor as soon as possible in order to make arrangements for work, handouts, quizzes, or tests that they may have missed. The supervising instructor has the final word on what work, etc. students may be allowed to make up. Every student has the right to appeal to the university any decision made by their supervising instructor.

- Late assignments will not be accepted unless prior arrangements have been made with the Instructor and because of extreme circumstances. (Not coming to lab, or forgetting, doesn't rate as an extreme circumstance.)
- No student will be allowed to make up any written exam, lab practical, exam, or quiz unless they have an official or medical excuse.
- Standards set by Purdue University as outlined in the Student Handbook and the University Regulations (1996-1997) will be observed in this course. Any student found participating in cheating, plagiarism, copying material from another person's disk, using illegal cribs or other materials during a written examination, lying to course instructors and lab assistants about his or her own work, stealing tests, quizzes, or answer keys, using past students' work from a previous semester, and any such activities will be considered in conflict with the printed academic honesty guidelines as set out by Purdue University and the School of Technology. In such cases the matter will be reported to the Office of the Dean and the appropriate Purdue University administration officers for consideration and possible disciplinary action.
- Students who have special needs, i.e. hearing or visually challenged, etc., or in need of tutoring, etc., may contact the Dean of Students Office located in Schleman Hall, Room 207, 494-1747 for further assistance.

Campus Emergencies

In the even of a major campus emergency, course requirements, deadlines, and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. The following are ways to get information about changes in this course:

- Course Web Page
- Course RSS Feed
- My email address: rjglotzbach@purdue.edu
- My office phone: 496-2953
- Preparing for a campus emergency: http://www.itap.purdue.edu/tlt/faculty/

Laptops, pagers, cell phones, & other electronic devices

- It is permissible to bring a laptop (notebook, palmtop) computer to class for the purpose of taking notes. However, it must be used QUIETLY ... that is, no clicking, clacking, or sound effects. If your laptop becomes a distraction to others in the class, you will be asked to turn it off and to NOT bring it back. Similarly, we will not tolerate beeping, chirping, ringing (or any other sound) from a pager or cell phone in class. If you must use your cell phone for any reason, you MUST leave the room.
- No electronic devices of any kind will be allowed at exams, except for approved calculators. Do not bring a phone, pda, pager, text messager, or any other electronic device to the exam. You will not be allowed to answer it. If you are caught with it during an exam, your exam will be confiscated, you will receive a zero on that exam, and you will be asked to leave the exam.
- TURN OFF your cell phones, pagers, and any other electronic devices that make noise. Be courteous to the instructor and your fellow classmates by turning off these devices before class begins. Ringing phones, etc, will not be tolerated during class.

Calculators

• Only NON-programmable calculators are allowed during exams & quizzes.

- No graphing calculators will be allowed.
- If you have a question about your calculator, ask beforehand.