



## **INSC 460 Internet Applications and Technologies**

**Fall 2013**

**Instructor: Priyanki Sinha**

### **Contact Information:**

**E-mail:** [psinha2@utk.edu](mailto:psinha2@utk.edu)

**Cell Phone:** 865.247.3784

**Office:** Hoskins Library, Room No. 3

**Office Hours:** Tuesday & Friday (2:00 PM – 3:00 PM) **(By Appointment)**

E-mails are the best way to reach me.

### **Course Objectives & Description:**

This course introduces the concepts of World Wide Web and Internet technologies (e.g., XHTML, XML, CSS) and how they are used to solve organizational, individual, discipline-specific and social problems. Topics include the history of and the role of Internet standards in the design of information systems; metadata; principles and practices of standards-compliant, accessible web design; informatics.

The course emphasizes markup, primarily the use of Extensible Hyper Text Markup Language (XHTML) with Cascading Style Sheets (CSS), but in addition, explains the roles of Web browsers and Web servers in delivering Web content. The course also introduces tools for creating, testing, and validating XHTML and CSS markup. Finally, the course provides an introduction to the creation and validation of XML documents.

At the end of the semester, based upon your completion of the class readings, assignments, projects and lectures, you will be able to:

1. Create, identify, and critique standards-compliant markup that also supports accessibility, usability, and maintainability.
2. Demonstrate fluency with the tools required to create, validate, and test markup, including Web browsers, text editors, Web servers, validators, and file transfer facilities.
3. Demonstrate the ability to design and code standards-compliant Web pages and assemble those pages into well organized, small-scale Web sites.
4. Demonstrate the ability to create XML documents and to validate those documents using DTDs and schemas.

Students will be introduced to a broad variety of concepts and an in-depth exploration will require working on assignments and projects. We can also schedule one or two face-to-face meetings with all the students in the class according to everyone's flexibility to discuss important topics or issues (**If required**). The goal of this class is not only to help you learn about internet technologies and applications but to assist you in utilizing all this practical knowledge in your future classes and career. You can definitely ask questions to your instructor if any concepts discussed in the class are not understood clearly.

Above all, learning a markup language is very easy. It is one of the easiest and fun things to learn when it comes to internet technologies. You will enjoy it!

### **Class Structure**

This course will be delivered to the students via asynchronous distance education (ADE) method which implies that each student will access each week's class sessions at a time of his or her convenience, during that week. This course will have **two** recorded class sessions of no more than 75 minutes each that will be made available to you each week (**Tuesdays and Fridays**).

UT is now offering ADE courses for undergraduate classes, in order to help students cope with balancing their busy schedules of classes, homework, jobs, and extracurricular activities. The goal of the ADE-delivered courses is to prepare students for future experiences in their workplace. By taking this class, you will be gaining both greater flexibility in managing your time, and valuable experience with this alternative learning environment.

UT and the School of Information Sciences (SIS) have successfully used distance education to deliver graduate classes for many years, and began offering undergraduate ADE courses in Fall 2009. It is important to recognize that taking an ADE class is different from a traditional class, or even a synchronous DE class, where everyone attends online at the same time. I will make efforts from my part to make the class as interesting as possible and provide you with motivation, encouragement, support and communication just the way you have in a regular class setting. On the other hand I also expect you to actively engage in class discussions (online) and demonstrate critical thinking skills and submit assignments on time. Learning is all about curiosity and dedication. I believe together we can learn a lot not only from this course but also from each other. There are a few simple guidelines to follow (listed below), which will ensure that you have a successful and satisfying ADE experience.

## **ADE Success Guidelines for Students**

**Accept that you must be more self-reliant in an ADE class:** Although students are always responsible for knowing everything in the syllabus and complying with the requirements of a course, this is especially true for ADE. Students are expected to show self-initiative, to make good time management decisions, and to be especially proactive in contacting the instructor when they are having problems, or don't understand something.

**Keep up with the weekly schedule outlined below:** Enjoy attending class at 2am in your pajamas, or from a location half way across the world, if you wish, but don't abuse the schedule flexibility by falling behind, just because the class doesn't meet at the same times each week. **THE SINGLE BIGGEST MISTAKE ADE STUDENTS CAN MAKE IS TO PUT OFF VIEWING THE CLASSES AND ALLOW THE WORK TO PILE UP.**

**Put extra effort into all opportunities for interaction with your classmates and instructor:** We will be using the online discussion board, blog tool, and other electronic means to interact as a class. Many students are very comfortable with interacting through electronic media like Facebook or G-chat, but whether you are or not, believe me that we can have meaningful discussions, and question and answer sessions, even though we will not be together at the same time, as long as you do your part to participate.

## **Accessing Lectures and Communication**

To take this course, you must have access to a computer with high speed Internet access, and you must use a UTK email account. You may use your own personal computer, or you may use the computers available in the various campus libraries or computer labs.

We will be using a software called **Blackboard Collaborate** to access the lectures. You will need to log in to the UTK Blackboard Website <https://bblearn.utk.edu/> with your **NET ID** and **Password**. You will then have to select **INSC 460** course link and click on it. Then follow these instructions: **Tools > Blackboard Collaborate > Recordings > Session 1.**

Please feel free to ask questions, doubts, clarifications regarding class topics or any other issue regarding the course content or class sessions. You may visit me during my office hours, or make an appointment at another time that is more convenient for you. E-mail is the best way to contact me. I check my e-mails on a very regular basis. I'll usually answer within 48 hours, but often will get back to you even faster! In case, I haven't answered your e-mails

in the specified amount of time (which rarely happens!), please send me another one. Sometimes, it is easy to get lost in the pile of numerous e-mails.

## **Student Responsibilities**

- **Do all assigned readings prior to attending each class session.** The lecture will assume that you know the information that is in the readings, and will build upon it.
- **Complete all assignments** and submit them on time, using the format and procedure specified by the instructor.
- **Check your e-mail and Blackboard regularly.** I will use email to return assignments, solicit student input, and make clarifications. Blackboard will also be used for announcements and the discussion board and other interactive activities.
- **Attend one brief face to face meetings with the instructor during the semester.** Please meet me in the beginning of the semester. These meetings can take place either during my scheduled office hours, or they can be scheduled at your convenience.
- **Participate** actively in the class by giving your best effort to the interactive activities using the discussion board, blog tool, or in-class activities. In addition, treat your colleagues with courtesy and respect by reading and reflecting on their online comments, and responding to them appropriately.
- **Timely online attendance is required.** The course schedule below lists which class sessions you should complete at your convenience during each week. It is essential that you keep up by attending the sessions in the proper week, so that you can complete assignments and the exam as scheduled. Blackboard provides statistics about whether or not a student has “attended” a recorded class session, which allows me to “take roll” just as I would in a traditional class.

## **Required Materials**

Textbook

Carey, P. (2010). *New Perspectives on HTML, XHTML, and XML*. 3<sup>rd</sup> ed.- Comprehensive. Boston, MA: Course Technology. 992 pages. ISBN-13: 978-0-495-80640-0; ISBN-10: 0-495-80640-4.

## **Recommended Materials**

Books

Chapman, N. & Chapman, J. (2006). *Web design: A complete introduction*. Hoboken, NJ John Wiley & Sons. 692 pages. ISBN-13: 978-0-470-06089-6; ISBN-10: 0-470-06089-1.  
[Publisher's book site](#) [Authors' book site](#)

Briggs, O., Champeon, S., Costello, E., & Patterson, M. (2004). Cascading style sheets: Separating content from presentation. 2d ed. Berkeley, CA: Friends of ED. 400 pages. ISBN-13: 978-1-59059-231-1; ISBN-10: 1-59059-231-X. [Publisher's book site](#).

## **Assignments and Evaluations**

### **Grades**

Projects	45%
Assignments	45%
Class participation	10%
<b>TOTAL</b>	<b>100%</b>

### **Projects 45%**

There will be 2 projects, each of which will cover one of the 2 divisions of the textbook (Level I and II Tutorials for Project 1 & Level III and IV Tutorials for Project 2. The details of the project will be discussed in the class and posted on Blackboard.

### **Assignments 45%**

There will be a total of 7 assignments worth 45% of the final grade.

Each assignment will be either a Review Assignment, a Case Problem, or a Reality Check Exercise. Review Assignments provide additional practice with skills learned in the tutorial and do not include anything of an exploratory nature.

There are four types of Case Problems:

- Apply – In this type of Case Problem, students apply the skills learned in the tutorial to solve a problem. Apply Case Problems can include one or two Explore steps, which go a little beyond what was presented in the tutorial.
- Create – In a Create Case Problem, students are either shown the end result, such as a finished Word document, and asked to create the document based on the figure provided; or, students are asked to create something from scratch in a more free-form manner.
- Challenge – A Challenge Case Problem involves at least 3 Explore steps. These steps challenge students by having them go beyond what was covered in the tutorial, either with guidance in the step or by using online Help as directed.
- Research – In this type of Case Problem, students need to go to the Web to find information that they will, in some way, incorporate into their work for the Case Problem.

Reality Check Exercises are comprehensive, open-ended assignments that give students the opportunity to practice skills by creating practical, real-world documents such as resumes and budgets. This type of exercise may encompass the concepts presented in a single tutorial or in a related group of tutorials.

## **Class participation 10%**

*The highest class participation grades are earned by students who contribute to class discussions in the live online lecture sessions and to asynchronous class discussions on Blackboard. In both cases, the quality of contributions to class discussions counts more than the quantity.*

## **Grading System**

<b>Grade</b>	<b>Performance Level</b>	<b>Score (%)</b>	<b>Quality Points</b>
A	Superior	92-100	4.0
A-	Intermediate Grade	88-91	3.7
B+	Very Good	85-87	3.3
B	Good	82-84	3.0
B-	Intermediate Grade	78-81	2.7
C+	Fair	75-77	2.3
C	Satisfactory	72-74	2.0
C-	Unsatisfactory	68-71	1.7
D+	Unsatisfactory	66-67	1.3
D	Unsatisfactory	62-65	1.0
D-	Unsatisfactory	60-61	0.7
F	Failure	0-59	0.0

## **Guidelines**

### **Assignments, Project Reports Submission**

Unless otherwise specified, all assignments should be typed, double-spaced, and in a 12-point font, with reasonable margins. Please include your name, date, course number, and appropriate pagination. Submit the assignments in BlackBoard, unless instructed to do otherwise.

### **Late Assignments**

All late assignments will receive an automatic 5 point reduction. The negative points will be listed in Blackboard grade center in a separate column.

## **Course Policies**

### **Class Participation: Interactive Activities**

In our ADE environment, class participation will occur using the interactive tools available on the Blackboard site. The Discussion Board allows both the instructor and class members to pose and answer questions, and to share thoughts or ideas with the group. Online communication and even the use of social networking applications are becoming essential parts of the professional and academic environment. Here are some ideas of how you can be involved in our online conversation:

- You can post questions to the discussion board based on what we have read.
- You can blog about topics that we are studying in class.
- You can share items from the news or even your own experiences (both successful and frustrating) from working in organizations, that relate to topics covered in class.
- You can let your colleagues know about helpful web resources that you find, that relate to topics covered in class.
- You will be asked to use the discussion board or blog tool to respond to in-class activities.

This portion of your grade will be based on your *efforts to join* the interactive online conversations. If your contributions exhibit both quality of thought and frequent participation, you will earn top points for this aspect of your grade.

### **Academic Integrity**

Please refer to *Hilltopics Student Handbook*. It can be accessed at: <http://web.utk.edu/~homepage/hilltopics> or a print copy obtained in Student Services or the Registrar's office.

*“The responsibility for learning is an individual matter. Study, preparation and presentation should involve at all times the student’s own work, unless it has been clearly specified that work is to be a team effort. Academic honesty requires that all work presented be the student’s own work, not only on tests, but in themes, papers, homework, and class presentation.”*

Cheating, plagiarism, providing unauthorized help and other acts of dishonesty violate the rule of academic honesty; the offender will be subject to penalties as set forth in *Hilltopics*. The instructor reserves the right to use plagiarism detection software, such as Turn It In.

### **CCI Diversity Statement (CCI BYLAWS, SECTION II-C)**

The College of Communication and Information recognizes that a college diverse in its people, curricula, scholarship, research, and creative activities expands opportunities for intellectual inquiry and engagement, helps students develop critical thinking skills, and prepares students for social and civic responsibilities. All members of the College benefit from diversity and the quality of learning, research, scholarship and creative activities is enhanced by a climate of inclusion, understanding and appreciation of differences and the full range of human experience. As a result, the College is committed to diversity and equal opportunity and it recognizes that it

must represent the diversity inherent in American society. The College is acutely aware that diversity and fairness are foundations that unite the College's faculty, staff, students, and the larger communication and information community (see <http://www.cci.utk.edu/diversity-statement> for CCI's full Diversity Statement).

**Disabilities**

Please contact the Office of Disability Services at 191 Hoskins Library at 865.974.6087 if you need course adaptations or accommodations. They will work with you to arrive at the appropriate program and register you for services. Also contact me so we can talk about solutions.

**Class Cancellation Policy**

Class will not be held if the University of Tennessee is officially closed (check the University homepage, [www.utk.edu](http://www.utk.edu), for confirmation of the status of University operations). If the class is cancelled due to University closure, or for any other reason, notification will be placed on blackboard and distributed via email ASAP prior to the regularly scheduled meeting time. The instructor reserves the right to cancel class for whatever reason. In the event of cancellation, students are required to keep up with all course readings.

**Course Schedule is attached below: \***

SL.No	Topics	Date/Day	Assignment Deadlines	Project Deadlines
1.	Course Introduction (Discussion of the syllabus)	21 <sup>st</sup> August, 2013 (Wednesday)		
2.	Webpage Development Session 1	23 <sup>rd</sup> August, 2013 (Friday)		
3.	Webpage Development Session 2	27 <sup>th</sup> August, 2013 (Tuesday)		
4.	Website Development Session 1	30 <sup>th</sup> August, 2013 (Friday)	<b>Assignment 1 Due</b>	
<b>LABOR DAY 2<sup>nd</sup> September, 2013 – No Classes</b>				
5.	Website Development Session 2	3 <sup>rd</sup> September, 2013 (Tuesday)		
6.	Working with CSS Session 1	6 <sup>th</sup> September, 2013 (Friday)		
7.	Working with CSS Session 2	10 <sup>th</sup> September, 2013 (Tuesday)		
8.	Creating Special Effects with CSS Session 1	13 <sup>th</sup> September, 2013 (Friday)	<b>Assignment 2 Due</b>	
9.	Creating Special Effects with CSS Session 2	17 <sup>th</sup> September, 2013 (Tuesday)		
10.	Working with Web Tables Session 1	20 <sup>th</sup> September, 2013 (Friday)		
11.	Working with Web Tables Session 2	24 <sup>th</sup> September, 2013 (Tuesday)		
12.	Working with Web Forms Session 1	27 <sup>th</sup> September, 2013 (Friday)	<b>Assignment 3 Due</b>	
13.	Working with Web Forms Session 2	1 <sup>st</sup> October, 2013 (Tuesday)		
14.	Multimedia Session 1	4 <sup>th</sup> October, 2013 (Friday)		<b>PROJECT 1 DUE</b>
15.	Multimedia Session 2	8 <sup>th</sup> October, 2013 (Tuesday)		
16.	Designing a Website with Frames Session 1	11 <sup>th</sup> October, 2013 (Friday)	<b>Assignment 4 Due</b>	
17.	Designing a Website with Frames Session 2	15 <sup>th</sup> October, 2013 (Tuesday)		
<b>FALL BREAK 17<sup>th</sup> and 18<sup>th</sup> October, 2013 –No Classes</b>				
18.	Working with XHTML Session 1	22 <sup>nd</sup> October, 2013 (Tuesday)		
19.	Working with XHTML Session 2	25 <sup>th</sup> October, 2013 (Friday)		
20.	Programming with JAVASCRIPT Session 1	29 <sup>th</sup> October, 2013 (Tuesday)	<b>Assignment 5 Due</b>	
21.	Programming with JAVASCRIPT Session 2	1 <sup>st</sup> November, 2013 (Friday)		

22.	Creating an XML Document Session 1	5 <sup>th</sup> November, 2013 (Tuesday)		
23.	Creating an XML Document Session 2	8 <sup>th</sup> November, 2013 (Friday)		
24.	Working with Namespaces Session 1	12 <sup>th</sup> November, 2013 (Tuesday)	<b>Assignment 6 Due</b>	
25.	Working with Namespaces Session 2	15 <sup>th</sup> November, 2013 (Friday)		
26.	Validating Documents with DTDs Session 1	19 <sup>th</sup> November, 2013 (Tuesday)		
27.	Validating Documents with DTDs Session 1	22 <sup>nd</sup> November, 2013 (Friday)		
28.	Validating Documents with Schema Session 1 and Session 2	26 <sup>th</sup> November, 2013 (Tuesday)		
<b>THANKSGIVING 28<sup>th</sup> and 29<sup>th</sup> November, 2013 - No Classes</b>				
29.	Revision of the Course (Problems and Discussions)	3 <sup>rd</sup> December (Tuesday)	<b>Assignment 7 Due</b>	
30.	Study Day	4 <sup>th</sup> December , 2013		
31.	Final Exam Period	5 <sup>th</sup> December – 12 <sup>th</sup> December, 2013		<b>PROJECT 2 DUE</b>

**Course Schedule is Subject to Change\***