

INF 201: Introduction to Web Technologies (3 credits)

TTH/5:45-7:05/ SS 0134

Spring 2013, Class 9506

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Course Information

Course description from *Undergraduate Bulletin*:

A technique-oriented introduction to client-based Web design and development technologies, including HTML/XHTML, CSS, JavaScript, digital imaging, file formats, etc.; also the elements of UNIX and networks necessary to understand and implement basic information management and transfer. Prerequisite(s): I INF 100X; not open to students who are taking or have completed I IST 361. http://www.albany.edu/undergraduate_bulletin/i_inf.html

A More Detailed Description

INF 201, Web Technologies, is a broad course that will cover the HTML, CSS, and JavaScript skills that are necessary to produce an aesthetically appealing valid webpage. To ensure the use of proper syntax, the course will focus on the protocols of XHTML. The course is cumulative in nature, producing pieces of the complete picture each week. By the end of the course, all of the pieces will creatively be put together to complete a large and complex project. This is an interactive Team-Based Learning course in which students will be a large part of the learning environment. Lectures and instructor-led demonstrations will be kept to a minimum and almost all class time will be devoted to hands on team activities. By the end of this course, each student will be able to produce a dynamic website that will be on the World Wide Web, utilize search engines to independently solve problems, and develop a better understanding of how to approach a problem from a creative thought perspective by applying broad knowledge across a variety of specific problems. The problems presented in this course may not have only one correct answer and therefore being successful in this course is not solely dependent upon your ability to memorize facts, but also your ability to apply information to issues at hand.

Course structure

Team-Based Learning

This course uses a Team-Based Learning (TBL) approach. On the first day of the course, you will be assigned to a team that will work together throughout the semester. Individual course grades will be influenced by team performance on team-based assignments and group tests. While in many courses, group work can be structured unfairly such that some students end up doing all the work while everyone shares in the credit, two factors will prevent that from happening in this class. First, all graded team tests will be preceded by an individual test and all team work will be succeeded by one of more individual assignments. For this each individual will be accountable, thus ensuring that individual team members are prepared to contribute to the team effort and participate in the collective learning process throughout the course. Second, each individual's contribution to team work will be assessed by his or her teammates during the semester, as well as the instructor.

TBL process

TBL has three main phases that will be followed by the student to ensure a successful learning environment.

Phase 1: Preparation- Before the start of each module, you are to complete the assigned readings and understand the content.

Phase 2: Readiness Assurance Test (RAT)- At the beginning of each module, an individual RAT (iRAT) will be administered. Immediately following the iRAT, the same test will be administered in the form of a group RAT (gRAT). Instantaneous feedback will be given to the group, so that your group knows the correct answer for each question as they take the test. There generally will be 10 minutes allotted per test, so it is imperative that you are on time and prepared to take them on the days in which they are administered. After the gRAT is completed, if your team feels that a question was misleading, unfair, or inaccurate, the team will have the opportunity to appeal that question to receive credit for it. An appeal should be written immediately following the completion of the gRAT and should be backed by evidence from the reading.

Phase 3: Group activities- The remaining portion of the module will consist of group activities that apply the knowledge gained from the readings to solve problems, produce products, discuss issues, etc. The answers will not be clear cut, as only information is presented in the readings. It is up to your group to figure out how to turn this information into knowledge and apply it through critical thinking, creative thinking, and practical thinking. Only periodic lectures will be given to expand on the readings and put it into the context of the course.

Prerequisites

IINF 100X

Not open to students who are taking or have completed IIST 361.

Course Goals

By the end of the semester, you should be able to:

- Understand and implement basic information management and transfer techniques
- Use current client-based Web tools to develop web pages
- Understand basic networking concepts
- Validate web pages to current standards
- Use the University at Albany UNIX server to host a website
- Critically evaluate basic web design principles
- Have a greater understanding of dynamic processes that occur in a team environment

Readings

Readings will be given throughout the semester. The readings will be available on Blackboard under the course content section. All students are expected to complete the assigned readings prior to class so that they can properly participate in discussions and class activities.

There is no assigned text book. Most information regarding (X)HTML is available on the web. In fact, most people have had the similar problems or tried to accomplish tasks similar to the ones you will be doing throughout the semester and have posted the answers to the problem or task online.

Optional: If you prefer to have a book as a predominant source of information instead of searching the web for answers, most of the HTML course material follows closely to:

Cottrell, Lee. *HTML & XHTML Demystified*. New York: McGraw-Hill, 2011. Print. ISBN: 978-0-07-174804-9

Additional Materials

- A USB Flash Drive (Thumb Drive)
- FileZilla Client (available at: <http://filezilla-project.org/>)
- A text editor program (i.e. Notepad++)
- Other technologies can be accessed through the University's Virtual Commons.

Course Policies

Attendance

Your in-class performance is key to your success in this course. Attendance, itself, is not graded. Instead, graded in-class activities and assignments constitute an important part of the course grade. It is not possible to maintain a passing average without consistent attendance. Missing class means the student earns an automatic zero for the activities or assignments or test missed. Because of the nature of the assignments, no make-up opportunities will be available. If you miss a class it is your responsibility to learn the material covered on your own.

Tardiness

Missing an assignment or activity that happened before a student arrives or after a student leaves also earns a zero. No make-up opportunities will be available.

If you know that it will be difficult for you to consistently get to class on time and stay for the entire period, you should take this course at a time that better fits your schedule. Being late frequently will guarantee a low grade for the course.

Make-up Policy

There are generally no make-up opportunities for missed assignments except in extenuating circumstances. Instead of asking to make up missed work, please see the course 'safety valves' described below.

Since there will be occasions in your life when missing a class meeting is simply unavoidable, this course has two no-fault safety valves.

Safety valve 1

You may miss one class worth of in-class RAT grades and two classes worth of in-class assignment grades. Keep in mind that an in-class assignment will follow the RATs, so if you miss an entire day when a RAT is given, you are also using one of your safety valves for in-class assignments. So, if you must miss class for any reason, it will be possible to drop the zero you would automatically receive for missing the test or assignment. Be careful not to waste your drop on frivolous things early in the semester, since you may need it if you catch a cold or need to leave town for a day later in the semester. If you do not use your safety valve for missed classes, you will be able to use your safety valve to improve your grade, by dropping your two lowest in-class assignment scores and your lowest RAT scores.

Plan carefully for classes that you know you will need to miss. Work, religious practice, sports team travel, military duty, club activities, fraternity/sorority obligations, family responsibilities, assignments for other courses, and even brief illnesses, etc—these are your responsibility to manage by using your safety valve. If you need to be out of class for any of these, make sure you have conserved your droppable grade to cover the class you need to miss.

Safety valve 2

If you become seriously ill during the semester, or become derailed by unforeseeable life problems, and have to miss so many assignments that it will ruin your grade, schedule a meeting with the instructor in order to make arrangements for you to drop the course to save your grade point average. Do not wait until it is too late to see the instructor when you get in trouble. You will be allotted two weeks from the time you return to campus from your serious illness or unforeseeable life problem to schedule the meeting with the instructor. After two weeks, this safety valve will expire.

Late Assignments

Completed assignments are due on the due date at the specified time, in class or submitted through Blackboard (as specified), depending on the assignment. Late assignments will be accepted, but at the cost of a full letter grade for missing the first, in-class deadline, and an additional letter grade for each additional 24 hours late up to three days late, at which point the grade will automatically be assigned 0. In-class assignments may be done only on the days they are scheduled.

Extra Credit

There may be extra credit work. All students will be expected to complete, and be graded on, the same set of assignments. Details to follow. All extra-credit opportunities are capped at no more than 5 points on your overall grade.

Withdrawal from the course

The drop date for the Spring 2013 semester is May 8 for undergraduate students. That is the last date you can drop a course and receive a 'W'. It is your responsibility to take action by this date if you wish to drop the course. In particular, grades of "incomplete" will not be awarded to students because they missed the drop deadline.

Cell phones & laptops

Please make sure your electronic devices are turned off before entering the classroom unless we are doing a class exercise where they are helpful.

Incompletes

As per the Undergraduate Bulletin, the grade of Incomplete (I) will be given "only when the student has nearly completed the course requirements but because of circumstances beyond the student's control the work is not completed." A student granted an incomplete will make an agreement specifying what material must be made up, and a date for its completion. The incomplete will be converted to a normal grade on the agreed upon completion date based upon whatever material is submitted by that time.

Important: Incompletes will not be given to students who have not fulfilled their classwork obligations, and who, at the end of the semester, are looking to avoid failing the course. This is asking for special treatment.

Academic Integrity

It is every student's responsibility to become familiar with the standards of academic integrity at the University. Claims of ignorance, of unintentional error, or of academic or personal pressures are not sufficient reasons for violations of academic integrity. See http://www.albany.edu/undergraduate_bulletin/regulations.html

To be clear, individual course work and individual examinations are individual exercises. Copying the work of others is a violation of the university rules on academic integrity. Individual course work is also key to you performing well on tests and being prepared for the future. Forming study groups and discussing individual assignments and general techniques is encouraged, but the final work for individual assignments must be your own work. For example,

two or more people may not create an individual assignment together and submit it for credit. If you have specific questions about this or any other policy, please ask before the due date.

The following is a list of the types of behaviors that are defined as examples of academic dishonesty and are therefore unacceptable. Attempts to commit such acts also fall under the term academic dishonesty and are subject to penalty. No set of guidelines can, of course, define all possible types or degrees of academic dishonesty; thus, the following descriptions should be understood as examples of infractions rather than an exhaustive list.

- Plagiarism
 - This applies to a variety of things beyond text. For example: images, code, thoughts, ideas, information, design, etc. Please ask before submitting something if you did not solely use your ideas to create the product and you are unclear on how to give credit to the original author.
- Allowing other students to see or copy your assignments or individual exams
- Examining or copying another student's assignments or exams
- Lying to the professor about issues of academic integrity
- Submitting the same work for multiple assignments/classes without prior consent from the instructor(s)
- Getting answers or help from people, or other sources (*e.g.* research papers, web sites) without acknowledging them.
- Forgery
- Sabotage
- Unauthorized Collaboration (just check first!)
- Falsification
- Bribery
- Theft, Damage, or Misuse of Library or Computer Resources

Any incident of academic dishonesty in this course, no matter how "minor" will result in

1. No credit for the affected assignment.
2. A written report will be sent to the appropriate University authorities (*e.g.* the Dean of Undergraduate Studies)

And may result in

3. One of -
 - A. A final mark reduction by *at least* one-half letter grade (*e.g.* B → B-, C- → D+),
 - B. A Failing mark (E) in the course, and referral of the matter to the University Judicial System for disposition.

Policies from Undergraduate Bulletin:

http://www.albany.edu/undergraduate_bulletin/regulations.html

Responsible Use of Information Technology

Students are required to read the University at Albany Policy for the Responsible Use of Information Technology available at the ITS Web Site:

http://www.albany.edu/its/policies_responsible_use_of_IT.htm

Time Management

For every credit hour that a course meets, students should expect to work 3 additional hours outside of class every week (3 x 3= 9). For a three-credit course you should expect to work 9 hours outside of class every week. Manage your time effectively to complete readings, assignments, and projects.

Available Support Services

Reasonable accommodation

Reasonable accommodation will be provided for students with documented physical, sensory, cognitive, learning and psychiatric disorders. If you believe you have a disability requiring accommodation in this class, please notify the Director of Disability Resource Center (Campus Center 137, 442-5490). That office will provide the course instructor with verification of your disability, and will recommend appropriate accommodations. In general, it is the student's responsibility to contact the instructor at least one week before the relevant assignment to make arrangements.

CCI Student Center

The College of Computing and Information Student Center (LI-84) offers tutoring, career development, social events and academic advising. Please stop by or email at ccistudentcenter@gmail.com. Visit the CCI Facebook page for more details and upcoming events: <http://www.facebook.com/CollegeofComputingandInformation#>

CCI Women in Technology

CCIWIT is dedicated to supporting, empowering, and building community among women within CCI and encouraging girls and women to pursue undergraduate and graduate studies in fields related to computer science, informatics, and information science.

Course Outline and Schedule

The following schedule of in-class topics and individual assignments is preliminary and may be changed as the semester progresses. The specific homework and reading materials will be provided in Blackboard at least one week before they are due. Students are expected to have read the listed material before it is covered in class.

Week start date	Content	Assignment due
20-Jan	<ul style="list-style-type: none"> • First Class - January 24 • Group assignment • Practice RAT – Syllabus • Introductions • Q&A about course 	
Module 1- HTML Basics: structure and formatting		
27-Jan	<ul style="list-style-type: none"> • RAT – January 29 • What is the web? • What makes a good webpage? • First webpage • Text formatting • Networking essentials 	-Module 1 readings
3-Feb	<ul style="list-style-type: none"> • Text organization • Hyperlinks • Lists and tables 	
Module 2 – Layout & Style		
10-Feb	<ul style="list-style-type: none"> • RAT – February 12 • Conceptualizing layout • Dividing up the page 	-Module 2 reading -Individual first webpage: Due Feb. 10 at 11:59pm
17-Feb	<ul style="list-style-type: none"> • Styles • CSS • Classes & selectors 	
Module 3 – Forms and Images		
24-Feb	<ul style="list-style-type: none"> • RAT – February 26 • CGI forms • Multimedia 	-Module 3 reading -Individual styled webpage: Due Feb. 24 at 11:59pm
3-Mar	<ul style="list-style-type: none"> • Photoshop • Images in HTML 	
Module 4 – Intro to JavaScript		
10-Mar	<ul style="list-style-type: none"> • RAT – March 12 • What is JavaScript? • Image rollovers / event 	-Module 4 reading -Individual graphics assignment: Due Mar. 10 at

	<ul style="list-style-type: none"> listeners – Dreamweaver • Image map 	11:59pm
17-Mar	Classes Suspended	
24-Mar	<ul style="list-style-type: none"> • Creating a function • User input • Variables • Data types • Operators and comparisons • Conditional statements 	
Module 5 – JavaScript: Statements and Operators		
31-Mar	<ul style="list-style-type: none"> • RAT – April 2 • If...else • Switch 	-Module 5 reading -Individual user input assignment: Due Mar. 31 at 11:59pm
7-Apr	<ul style="list-style-type: none"> • loops 	-Final individual project proposal due: April 12 at 12:59pm
Module 6 – JavaScript: Validation, Errors & Object Models		
14-Apr	<ul style="list-style-type: none"> • RAT – April 16 • Form validation • Try..catch (error) 	-Module 6 reading -Individual conditional testing assignment: Due Apr. 14 at 11:59pm
21-Apr	<ul style="list-style-type: none"> • DOM • BOM 	
28-Apr	<ul style="list-style-type: none"> • Project work week! 	-Individual BOM Assignment: Due Apr. 28 at 11:59pm
5-May	<ul style="list-style-type: none"> • Final Presentations • Debrief/Last week 	
12-May	<ul style="list-style-type: none"> • Final projects due 	-Final individual projects due May 12 at 11:59pm

Grading and course requirements

In class Assignments (20%): There will be an in class assignment almost every day where you will complete a task with your team. This will be weighted equally for a total of 20% of your grade.

Peer evaluation (5%): There will be two peer-evaluations that will contribute to this grade along with the instructor’s observations.

Individual Assignments (20%): There will be six individual assignments. You must submit them via BLS. These are not quick and easy tasks, so plan accordingly.

Readiness Assurance Tests (25%): These tests will be based solely on the assigned reading. The two grades from the iRAT and gRAT will be averaged to formulate your final individual score.

Final project (30%): This project is due near the end of the semester and consists of the design and construction of a website and presenting it to the class (proposal 5% and final website 25%). The project will entail you, independently, creating a dynamic website from scratch. The theme of the page is up to you, it just must be appropriate for a classroom setting and may not violate any of the University's policies. The detailed instruction and grading criteria will be provided at the beginning of April.

A-E graded

93 – 100% A

90 – 92% A-

87 – 89% B+

83 – 86% B

80 – 82% B-

77 – 79% C+

73 – 76% C

70 – 72% C-

67 – 69% D+

63 – 66% D

60 – 62% D-

0 – 59% E