Course Information

INF 201: Introduction to Web Technologies (3 Credits)
Meeting schedule: Tuesday and Thursday, 2:45-4:05 PM, SS0256
Class number: 7163
Semester: Spring 2016

Contact Information

Instructor: Norman Gervais
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Laboratory Schedule: SLG02, Fridays 1:30-3:00

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. 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. Lectures will be kept to a minimum and most of the time for this class will be devoted to team based hands on activities and discussions. 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.

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
- Validate web pages to current standards
- Use the University at Albany UNIX server to host a website
- Critically evaluate basic web design principles

Required Material

Readings

Readings will be given throughout the semester the week before the start of each module. The readings will be available on Blackboard. All students are expected to complete the assigned readings prior to tests, discussions and activities.

There is no assigned text book. Most information regarding (X)HTML is available on the web. In fact, most people have had 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 online.

Optional: If you prefer to have a book as a predominant source of information instead of searching the web for answers, please contact me for suggestions.

Additional Materials

Students will require access to a computer on campus or a computer that they have permission to install software, a modern generation browser, and the Internet.

Course Learning Activities

Teams
This course will be using an instructional method that aims to help develop your workplace learning skills and will be done in a way that will hold teams accountable for using course content to make decisions that will be reported publically and subject to cross-team discussion/critique. You will be assigned to a team with several members. Teams will be announced during the first week of the term. You will sit with your team during all classroom sessions.

Final individual grades will be influenced by team performance on team-based assignments. 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, three factors will prevent that from happening in this class. First, all graded team quizzes will be preceded by an individual quiz, thus ensuring that individual team members

are each prepared to contribute to the team effort. Second, nearly all team work will be succeeded by one individual assignment and the individual final project, for which each individual will be accountable. Last, each individual's contribution to team work will be assessed by his or her teammates during the semester.

The process
This course is divided into six 2 week long learning modules and a final project, which is broken up into two parts. You *must* do the readings for each module before the unit's start.

The specific order of events for each module that will enforce this mechanism is outlined in four phases below:

Phase 1 – Preparation: You will complete **specified readings** for each module by the first day of each module.

Phase 2 – Readiness Assurance Test: At the first class meeting of each module, you will be given a **Readiness Assurance Test** (RAT). The RAT test (10 multiple-choice questions) measures your comprehension of the assigned readings, and helps you learn the material needed to begin problem solving in phase 3. The purpose of phase 2 is to ensure that you and your teammates have sufficient foundational knowledge to begin learning how to apply and use the course concepts in phase 3. **RATs are closed book and based solely on the assigned readings, not on lecture or other in-class preparation beforehand.**

- **Individual RAT (iRAT)** – You individually complete a timed 10 question multiple-choice test based on the readings.
- **Team RAT (tRAT)** - Following the iRAT, the same timed multiple-choice test is re-taken with your team. These tests use a "scratch and win" type answer cards known as an IF-AT. You negotiate with your teammates, and then scratch off the opaque coating hoping to reveal a star that indicates a correct answer. Your team is awarded 10 points if you uncover the correct answer on the first scratch, 6 points for second scratch, and 2 point for third scratch.
- **Appeals Process** - Once your team has completed the team test, your team has the opportunity to complete an appeal. The purpose of the appeal process is to allow your team to identify questions where you disagree with the question key, question wording, or ambiguous information in the readings. Instructors will review the appeals outside of class time. Only teams are allowed to appeal questions (no individual appeals).
- **Feedback and Mini-lecture** - Following the RATs and Appeal Process, the instructor may provide a short clarifying lecture on any difficult or troublesome concepts.

Phase 3 - In-Class Activities: You and your team use the foundational knowledge, acquired in the first two phases, to make decisions that will be reported publically and subject to cross-team discussion/critique. We will use a variety of methods to have you report your team's decision at the end of each activity. The presentation of your team responses is critical to the team grade. You should expect each team member to present individually and for the entire team to present with smooth transitions. These activities should be expected to be done almost every day during the six modules.

Phase 4 – Individual Activities: You will independently apply the foundational knowledge and skills acquired in the first three phases as an individual outside of class. These will be due the last day of each module.

Final project: The final project will incorporate many features from the 4 phases of each module. The deliverables consist of a proposal, presentation, and a final website that differs from anything created in the previous steps. The final website will be divided into two parts.

Final project proposal: By the end of module 3 you should submit a detailed description of how you envision your final website based on modules 1-3 (Part I of the final website). Rough sketches of layouts, themes, number of pages, broad content of each page, etc. are all good ideas to include. Specific criteria regarding format and examples will be provided by the beginning of module 3.

Final project presentation: This is an opportunity for you to share all of your hard work with your classmates via discussion. In addition, this is great chance to collaboratively brainstorm and ask your classmates for ideas on what else to include to earn more points on your project or how to overcome something you are stuck on in Part II.

Website: This project is broken up into two parts. The first part is due Mar. 11 and consists of the design and construction of a static individual website from scratch. The second part is due May 3 and consists of adding dynamic content to the first part, making the website dynamic. The theme of the page is up to you, it just must be appropriate for a classroom setting, may not violate any of the University's policies, and must be significantly different then all previous work completed during the semester. The detailed grading criteria for part I will be given at the start of module 3 and the grading criteria for part II will be given at the beginning of module 6.

How You Will Be Evaluated

Category	Weight
RATs *(Your final RAT score will be an average of your iRAT and tRAT scores)*	15%
Team Exercises	15%
Individual Assignments	36%
Project Proposal	2%
Project Presentation	3%
Final Project Website	25%
Team member performance	4%
Total	100%

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

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		

Course Policies

Make Up Policy

Completed assignments, discussions, quizzes and the project and its associated proposal and presentation are due on the due date at the specified time and must be submitted through Blackboard. Late Individual activities will be accepted up to 24 hours late, but at the cost of a full letter grade for missing the deadline. Quizzes, in class activities, and the project and its associated proposal and presentation will not be accepted late. It is expected that you will have a backup plan that would allow you to complete the required course work on time in the event that you are having technical difficulties on your end (i.e. computer virus, inconstant internet connection, etc.). If you know that it will be difficult for you to consistently turn in the required work on time, you should take this course at a time that better fits your schedule.

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

Safety valve 1

Your lowest in-class activity grade and your lowest RAT grade (individual and team) will be dropped. So, if you must miss one of these for any reason, it will be possible to drop the zero you would automatically receive for missing it. 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 this safety valve, you will be able to use your safety valve to improve your grade, by dropping your lowest RAT and discussion score.

Plan carefully for dates 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 cannot participate for any of these, make sure you have conserved this safety valve to cover the quiz and/or in class activity 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.

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

Course work and examinations are considered individual exercises unless otherwise explicitly specified. Copying the work of others is a violation of university rules on academic integrity. Individual course work is also key to your being prepared and performing well on tests and exams. Forming study groups and discussing assignments and techniques in general terms is encouraged, but the final work must be your own work. For example, two or more people may not create an assignment together and submit it for credit. If you have specific questions about this or any other policy, please ask.

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
- Allowing other students to see or copy your assignments or 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 no credit for the affected submission as well as additional possible ramifications which can be found in the 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:
https://wiki.albany.edu/display/public/askit/Responsible+Use+of+Information+Technology+Policy

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 (Business Administration 120, 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.

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.

Withdrawal from the course

The drop date for the Spring 2016 semester is April 5 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.

My Expectations

This course is set at a very fast pace that is not self-paced. You are expected to keep up with the readings and work, as it will be very difficult to catch up if you fall behind. For every credit hour that a course meets, students should expect to work 3 additional hours outside of class every week. For a semester length three-credit course you should expect to work 9 hours outside of class every week (3x3=9). Manage your time effectively to complete readings, assignments, class work, and project components.

Although no programming or previous web creation is required coming into this class, I do expect that everyone has an basic understanding of how to use a computer and browse the internet. You will be required to utilize the following software:

- FileZilla Client (available at: http://filezilla-project.org/, this should be free to download)
- A text editor program (i.e. Notepad++, most computers already have one installed and if not many are free)
- Either Terminal (Mac and Linux OS) or Putty (Windows OS)

Course Schedule

COURSE CALENDAR AND ASSIGNMENT SCHEDULE
The following schedule preliminary and may be changed as the semester progresses.

Topics/Activities	Start Date	End Date	Assignments Due, Day Due
Course introduction	21-Jan	25-Jan	Syllabus
Module 1: History of the World Wide Web, Design, Software, HTML Basics: Structure and Formatting	26-Jan	8-Feb	RAT Tuesday, 26-Jan (readings available in Blackboard) Individual Assignment #1 Due Monday, 8-Feb
Module 2: Layout and style	9-Feb	22-Feb	RAT Tuesday, 9-Feb (readings available in Blackboard) Individual Assignment #2 Due Monday, 22-Feb
Module 3: HTML 5, Images, Multimedia	23-Feb	7-Mar	RAT Tuesday, 23-Feb (readings available in Blackboard) Individual Assignment #3 Due Monday, 7-Mar Project proposal, Due Monday 7-Mar
Final project part I	8-Mar	11-Mar	Final Project - Part I, Due Friday 11-Mar
Spring Break	12-Mar	18-Mar	None
Module 4: Intro to JavaScript, User input,	22-Mar	4-Apr	RAT Tuesday, 22-Mar (readings available in Blackboard) Individual Assignment #4 Due Monday, 4-Apr
Module 5:JavaScript: Statements and operators	5-Apr	18-Apr	RAT Tuesday, 5-Apr (readings available in Blackboard) Individual Assignment #5 Due Monday, 18-Apr
Module 6: JavaScript: Validation, object models, third party libraries, APIs	19-Apr	2-May	RAT Tuesday, 19-Apr (readings available in Blackboard) Individual Assignment #6 Due Monday, 2-May
Final project part II *Last class May 3	3-May	3-May	Presentations and Final Project - Part II, Due Tuesday 3-May