

# Fall Semester 2019

## INFO 2420 Web Application Design

### INSTRUCTOR INFORMATION

**Instructor: Brent Clark**

**Office: UCAS Bldg on Campus**

**E-MAIL:** Contact instructor using Canvas email

(Use this only if Canvas is down: [brent.clark@ucas-edu.net](mailto:brent.clark@ucas-edu.net))

### CONTACT GOAL:

Email checked daily: Monday - Friday (before 5:00 p.m.)

Your instructor will make every effort to reply to your email within a 24-hour period on weekdays, but holidays and weekends may take longer.

**CLASS ANNOUNCEMENTS:** INFO 2420 class announcements will be posted in the Announcements section of Canvas. You are responsible for checking these announcements throughout the semester.

### COURSE DESCRIPTION

This course focuses on the design and construction of WWW Pages and maintenance of Web Sites in a multi-platform environment. Students learn the current HTML 5 standards and are exposed to the latest enhancements. Covers design concepts, page layout, and accessibility issues. INFO 2420 will cover HTML 5 in depth, as well as site management concepts, and current-generation design concepts. Students will also learn to use WYSIWYG Web authoring tools for code development and graphics. Individual projects will be assigned over the course of the semester. Students will also be introduced to JavaScript basics and learn how to incorporate existing code snippets and external files into their Web site.

### OVERALL COURSE GOALS

The primary goals of this course are to develop a basic understanding of website design, along with the necessary underlying information.

During this course students will:

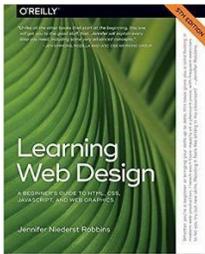
1. Examine overall site design and implementation.
2. Review fundamental HTML concepts.
3. Create and use HTML forms, tables, templates, image maps, hyperlinks, etc.
4. Write and validate clean HTML 5.
5. Make use of CSS for separating presentation from page content.

6. Learn how to use JavaScript to add behaviors to a site.
7. Design websites using current-generation tools.
8. Analyze the different graphical formats supported by the WWW.
9. Modify web graphics for greater performance.

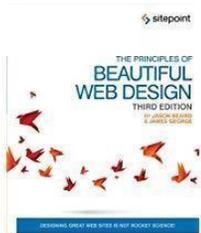
## PREREQUISITE COURSE AND COMPETENCIES

Computer Literacy is a required competency for this course. You will be expected to have a basic skill level in the following: saving files, using email and sending attachments, searching on the Internet, using a word processor, and creating simple graphics in a presentation tool.

## COURSE MATERIALS



**Learning Web Design: A Beginner's Guide to HTML, CSS, Javascript, and Web Graphics** Author: Jennifer Niederst Robbins, 5th Edition O'Reilly Media, Inc.  
ISBN: 978-1-491-96020-2



**The Principles of Beautiful Web Design** Author: Jason Beard, 2<sup>nd</sup> or 3<sup>rd</sup> Edition  
SitePoint  
ISBN-10: 098057689X  
ISBN-13: 978-0980576894

## REQUIRED PC SOFTWARE and SERVICES:

It is expected that you will have access to a Windows operating system. We are not able to fully support Macintosh unless you wish to run a VM in parallels or bootcamp.

You will need to have the following software:

- **Internet Explorer** version 8 but preferred version 9 (needed for CSS3).
- **Firefox** version 3.6.XX or later or version 8 or later.
- **GIMP** is an acronym for GNU Image Manipulation Program. It is a freely distributed program for such tasks as photo retouching, image composition and image authoring. It works on many operating systems, in many languages.

The free download for the latest version of GIMP can be found at:

<http://www.gimp.org/downloads/>

Detailed directions for the installation process will be given later in the semester. The current stable version is GIMP 2.8.16.

- **Microsoft Expression Web 4** – This software is available for students through the Dreamspark Microsoft license and will be used as a development environment that supports CSS-based layout and formatting, templates, image maps, and many other web management features. Your instructor will post information on how to login to get this software later in the semester.
- **CoreFTP Client** - You will need to have an FTP client to upload your practice exercises and projects to the course web server for grading. Our server works best with a popular open source FTP program called CoreFTP and is available for download from: <http://www.coreftp.com/download.html> (Either free 32-bit version should work fine.)
- **Firebug Firefox Addon** – Firebug is a development tool that allows you to edit, debug and monitor CSS, HTML and JavaScript code. We will mainly use this tool to help debug our JavaScript code. <http://getfirebug.com/downloads>
- **Internet Access** is needed for accessing your coursework and also for uploading to the course Web Server. Easy and frequent Internet access is an **ABSOLUTE** must.

## CLASS PROCEDURES

**FOLLOW THE SCHEDULE:** There are required due dates for all the course projects, quizzes and exams. The **COURSE SCHEDULE** is on the Canvas Home page, showing week-by-week activities. Please follow the schedule. This is a semester course and all assignments, quizzes, exams and projects must be completed within the bounds of the 15 weeks. The IS&T department will not give an Incomplete grade because work was not completed.

Weekly lesson modules found on the Canvas home page have been created for each week of the semester that include slideshow(s), and practice exercise(s). Most weeks will also include a quiz, exam, and/or project assignment. You should complete the quizzes, exams and project assignments on or before their posted due dates.

All of your completed practice exercises and projects will be uploaded to the course web server where they will be graded. There will be a lesson that covers the FTP procedure for doing this. You will not email any projects directly to your instructor.

**TIME MANAGEMENT:** The Northwest Accreditation Board that accredits UVU has recommended that students be expected to spend 3 hours for every credit hour of a course per week. So if the course is 3 credits, that would be **9 hours per week** of work expected in a 15-week semester.

**GETTING HELP:** Your instructor will be available in his office to provide help during posted office hours. You may also communicate with your instructor via Canvas **MAIL** or make a phone call during office hours. You may also leave a voice message at other times. Every effort will be made to answer your emails within 24 hours, except during holidays and weekends.

There will also be a tutor available in the Academic Tutoring Center located in Room CS 612. Office hours for the center are 8 am to 8 pm.

One of the best resources for help in this course will be your fellow students. You may post questions or answers in the Canvas **GET HELP DISCUSSION** area. Your instructor and classmates will try to answer these questions. You may not post code in the discussion area. Keep your discussions general. Part of learning to develop for the Web involves doing it yourself.

## GRADING

**GRADING:** Evaluation of your achievement of the course objectives will be based on the following components:

Practice Exercises	10%
Discussions	10%
Individual Projects	30%
Exams	35%
<u>Quizzes</u>	<u>15%</u>
<b>TOTAL</b>	<b>100%</b>

Grades will be assigned based on the following scale.

A = 94-100%	B+ = 87-89%	C+ = 77-79%	D+ = 67-69%
A- = 90-93%	B = 83-86%	C = 73-76%	D = 63-66%
	B- = 80-82%	C- = 70-72%	D- = 60-62%
			E = 59% or below

## PROJECTS

## Individual Projects:

You must complete 9 individual projects this semester. These are not group projects, so it is expected that your work is unique to your own projects (see course ethics statement). Do not share your files or code with other students in the course.

For all class projects, except the first, you will be required to choose only one of the fictional businesses provided by your instructor as the subject of your projects. Content had been gathered for each business that you will be required to use.

There will be 9 projects assigned during the course. The project specifications and resource files are found in the **ASSIGNMENTS** area of Canvas. Projects cover topics found in your readings and practice exercises.

- Each project requires creation of one or more web pages. Do not wait to begin your projects until the due date or you will not be able to receive help with problems you may be having. If in doubt about a requirement, be sure to ask for help from your instructor.
- Each project is worth 75 points. Some of the project points are earned by meeting the technical requirements of the project and some of the project points are earned by meeting the aesthetic or usability requirements of the project.
- You may only use HTML tags and CSS discussed in the course for your class projects. You must not use frames for your page layout. Only use JavaScript in projects specifically designed to explore features of JavaScript. If in doubt about what to use in a project, ask your instructor.
- All projects will be uploaded to the course web server using an FTP client. The specifics of how to do this will be covered in a lesson later in the semester. You will not email your projects to your instructor. Projects not uploaded to the Yoda, course Web server will not be graded. Do not modify your code on the Web server after submitted as this will change the date last modified which is used to check the date completed.
- Projects must be your own unique, individual work. Projects should be completed by their required due dates. Late projects will lose up to 10 points from the graded score. **Projects submitted more than three calendar days late will not be graded.**

## PRACTICE EXERCISES

A hands-on practice exercise for the topics presented in each week's lecture and readings. These practice exercises will help you learn how to apply important skills needed to complete your projects this semester. A screencast of these practices is also provided for those who want to view them.

You should make sure you get all your questions answered about the practices before moving on to a project. You will upload each practice exercise folder (except the first two) to the Yoda web server to be graded. You should also be sure to email your instructor in

Canvas about specific requests for feedback or help. It is your responsibility to clarify any misunderstandings about requirements or processes that you may have.

## Discussions

There will be a weekly discussion topic related to web design. You will be **required** to post a meaningful response in the weekly discussion topics. One or two meaningful paragraphs will usually suffice.

## QUIZZES AND EXAMS

**QUIZZES:** Quizzes will be given throughout the semester and can be found in the weekly modules. Each quiz will test your knowledge of previously covered concepts. You will be quizzed on your assigned readings, information in slideshows and skills learned in the projects and practice activities. Quizzes allow for use of notes or the textbooks, but they are not open neighbor or friend (see course ethics statement).

There is a **20-minute time limit** placed on each quiz. You must complete each quiz within that time frame. Each quiz must be completed by the required due date. It is important that you complete the quizzes when they appear on the **COURSE SCHEDULE**; no late quizzes will be allowed!

**EXAMS:** Two exams will be given this semester. Each exam must be completed by the required due date. You can find the exams in the **QUIZZES** area of the course. Unlike taking a regular quiz, the Midterm and Final exams will be administered in the UVU Testing Center. An exam review will be provided about a week before the exam.

If you cannot take the exam in the UVU Testing Center, you must obtain a Distance Ed approved proctor. You must also contact your instructor that you will need a proctor. This approved proctor must be done by the third week of the semester.

### UVU CLASSROOM TESTING CENTER LOCATION:

The Testing Center is located at the northwest corner of campus. Guidelines for taking exams in the testing center can be found at: <http://www.uvu.edu/testingervices/>

## ABET Accreditation

The **Information Systems program** at UVU is accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). In addition, the Information Systems and Technology (IS&T) Department has applied to accredit the Information Technology program. According to ABET, "accreditation is proof that a collegiate program has met certain standards necessary to produce graduates who are ready to enter their professions" (<http://www.abet.org/why-accreditation-matters/>).

The IS&T Department follows strict data collection, curriculum, and assessment standards to maintain ABET accreditation. To ensure both Information Systems and Information Technology programs strive to meet the standardized outcomes, the following outcomes will be *addressed* but not assessed in this course:

- (c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet the needs of an organization and its users. [IS, IT]
- (i) An ability to use current techniques, skills, and tools necessary for computing practice. [IS, IT]

## TECHNICAL PROBLEM SOLVING

You are responsible to make sure you have access to the Canvas course materials of the course as well as the course web server. This means that if you plan to access these resources outside of the CS labs, that you must have continuous and reliable Internet access. You may contact UVU Helpdesk at 801-863-8888 for help with Canvas issues.

You will be given a student account on the Yoda web server for the semester. Your instructor will email you the username and password for access to the web server. If you have added the class late, you may need to email a reminder to your instructor.

## STUDENTS WITH DISABILITIES - ATTENTION

If you have any disability which may impair your ability to successfully complete this course, please let your instructor know in your initial email contact. Accommodations are coordinated through the instructor in consultation with the Office of Services for Students with Disabilities, and will require medical and/or psychological documentation. This is a semester long course and all assignments, exams and projects must be completed within the bounds of the semester. This department will not give an Incomplete grade because work was not completed.

## COURSE ETHICS STATEMENT

Each student is expected to complete their own projects, quizzes and exams. You have paid a premium price for your education and you should make sure you earn the knowledge you have invested in. If your coursework is found to be substantially like that of another student, you will receive a 0 on that assignment. You may be asked to explain and justify your work in this type of situation. If the copying continues, you will fail the course.

Because of the temptation to copy the code of others, please do not share code or files with each other in the Canvas **DISCUSSION** topics. You may generally describe problems if you are asking for help, but do not share actual source code with others.

You cannot rely on the brain power of others when you enter the work force. One of the most important side effects of courses like this one is that you learn how to learn.

**SPECIAL NOTE:** Copyright plagiarism is rampant with the easy availability of content via the WWW. Images and source code found on the Web are considered to be the intellectual property of the author unless you find specific statements to the contrary. Companies and individuals spend a lot of money and resources to develop materials for the Web. You should get in the habit of creating your own content for your Web pages. If you are developing a commercial site, you may be liable for huge fines if you use

copyrighted materials. Professional borrowing of Web content should be limited to research and information gathering only.

## Academic Honesty

Academic dishonesty will not be tolerated. The penalty for a first offense is failing grade for the assignment, test, or quiz. The student will not be allowed to resubmit that assignment, test, or quiz for a grade. A second offense will result in a failing grade for the course. All violations of academic integrity will be reported to (a) the Information Systems & Technology Department Chair and (b) the Student Conduct Director. Multiple occurrences of academic integrity violations on record for a student will involve further sanctions, such as probation, suspension, expulsion, and revocation of admissions or degree. Please read Section D Academic Responsibilities and Section M Sanctions described at <http://www.uvu.edu/catalog/current/policies-requirements/student-rightsandresponsibilities.html>.

“Cheating is the act of using, attempting to use, or providing others with unauthorized information, materials, or study aids in academic work. Cheating includes, but is not limited to, passing examination answers to, or taking examinations for someone else, or preparing or copying others’ academic work.” Cheating includes copying assignments and assessments from another student, taking screenshots of quizzes and tests, sharing copies of unauthorized screenshots, etc., or using a substantial portion of another student’s work as your own work. In other words, if it appears to the professor that the work of two or more students is substantially the same, sanctions will be imposed on all parties. Even after the course is completed, sanctions may be imposed. That is, if evidence surfaces indicating academic integrity violations occurred, you may receive a failing grade on a deliverable, failing course grade, or revocation of a degree.

## Teacher/Course Evaluations

UVU is dedicated to providing quality academic experiences for students. Help us identify areas where I can improve my teaching by participating in the Student Ratings of Instructor (SRI). Your confidentiality is assured. Your feedback is critical so we can improve the teaching and learning at UVU. When the SRI’s become available near the end of the semester, please participate in this process.

## CAVEAT

The course schedule, project due dates, and topics in this Canvas site may change. Every student is responsible for checking the class Canvas **MAIL** on a regular basis. This syllabus is also a living, evolving document. Your instructor will communicate any changes to you as soon as possible.

## Backup Warning

You must keep backup copies of all your graded work until the end of the course; recording errors may occur, servers may crash, or your instructor may lose your scores due to some hardware failure or accident. It is your sole responsibility to prove you have completed all the required work at the end of the semester! Print out your quiz scores, project scores, and exam scores often as well as specific project grade forms. Always

keep a copy of your projects in the event that there are problems with the course web server.