



Department of Information Sciences and Technology
Volgenau School Engineering

IT 331 Web I: Web Development
Spring 2018

Syllabus

revised January 10, 2018

Course Description

IT Information Technology

331 Web I: Web Development (3:3:0) *Prerequisites: IT 106 and 213; or permission of instructor.* Introduces the principles and techniques necessary for successful client-side web development. Topics such as HTML5, Cascading Style Sheets, JavaScript, DOM, XML, AJAX, and jQuery are presented. Students will learn to develop attractive and interactive web pages and applications and use client-side web-scripting languages to solve problems both with a text editor and more powerful WYSIWYG HTML editors.

Prerequisites

The pre/co-requisites for this course are IT 106 and 213 (or permission of instructor). A grade of "C" or better **must** be achieved in the prerequisite course **before** a student is qualified to take this course. The prerequisite course must be completed prior to, not concurrently with, this course.

Rationale

The old type of "read-only" or "brochure" websites that contain only static contents can no longer satisfy the needs of today's Web users. The growing demand for more interactive and dynamic Web applications requires Web developers to cope with a variety of emerging and existing client-side Web technologies. This course is intended to develop both practical skills and a general appreciation of Web technologies which are emerging at such a tremendous rate. Students will learn client-side Web programming in the context of solving practical problems and building full-featured websites.

Course Outcomes

On successful completion of this course, students will be able to:

- Understand advanced Web design principles and technologies
- Create attractive Web interfaces with client-side technologies and popular Web authoring tools, such as Microsoft Expression Web and Adobe Dreamweaver.
- Create Web pages with emerging and existing technologies, such as HTML5, CSS3, Twitter Bootstrap, JavaScript, DOM, XML, JSON, AJAX, and jQuery
- Design, create and publish advanced interactive websites with accessible, user-friendly

interface design and features

Supported Student Outcomes at the Program Level

- (c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- (i) An ability to use current techniques, skills, and tools necessary for computing practice

Major Topics

- HTML5
- Cascading Style Sheets (CSS3)
- Bootstrap
- JavaScript: Control Structures; Functions; Arrays; Objects; Events
- Document Object Model (DOM): Objects and Collections
- Extensible Markup Language (XML)
- JavaScript Object Notation (JSON)
- Ajax-Enabled RIAs and AJAX
- jQuery: Core; UI; Plugins
- Developing attractive and interactive Websites and applications with client-side Web technologies and HTML editors

Textbooks

There is one required textbook for this course:

Internet & World Wide Web – How to Program, 5th edition

Harvey M. Deitel, Paul J. Deitel;

ISBN-10: 0132151006 | ISBN-13: 9780132151009

[Publisher's URL](#)

An [electronic version](#) of the textbook, provided by Safari® Tech Books Online, is accessible through the university library website *free of charge*.

Grading

Grades will be awarded in accordance with the GMU Grading System for undergraduate students. See <http://catalog.gmu.edu/policies/academic/> under [Grading](#) for more information.

Letter grades will be assigned according to the following scale:

Numeric Score	Letter Grade	
97 – 100	A+	Passing
93 – 96	A	Passing
90 – 92	A–	Passing
87 – 89	B+	Passing
83 – 86	B	Passing
80 – 82	B–	Passing
77 – 79	C+	Passing
73 – 76	C	Passing
70 – 72	C-	Passing*
60 – 69	D	Passing*
0 – 59	F	Failing

* Grades of "C-" and "D" are considered passing grades for undergraduate courses. However, a minimum grade of "C" is required in the BSIT program for any course that is a prerequisite for one or more other courses.

Final grades will be determined based on the following components:

Assignments	100%
Projects (5)	45%
Lab (10)	35%
Quizzes (10)	20%

Project includes:

- Project 1: HTML5 & CSS & Bootstrap (16%)
- Project 2: JavaScript (8%)
- Project 3: DOM & Events & XML & JSON (8%)
- Project 4: AJAX & jQuery (8%)
- Final Presentation (5%)

These components are outlined in the following sections.

Projects:

Students are required to complete four projects in this course and give a final presentation in the last class. For more information about the projects, check the Project folder on Blackboard. Projects are always due at 11:00PM on the listed due date. **Late submission for Project 1~3 may be accepted but a late penalty of 10% is assessed for every calendar day beyond the due date; late submission for the Project Presentation and Project 4 cannot be accepted for any reason.**

Lab Exercises:

There are 10 lab exercises, which will help you prepare for the projects. Students are encouraged

to do the lab exercises in class during lab time, however, **extra time outside of the lecture and lab time is often needed to complete exercises**. Lab exercises are always due the following class day at 12:00PM (noon). **Late submission will not be accepted.**

Quizzes:

There are 10 quizzes to be taken in class, which will be used to evaluate your mastery of terms and concepts along with the successful application of those terms and concepts. You should prepare for quizzes by understanding the material presented in class and doing the Review Exercises at the end of each assigned chapter in the text. You will be given 15 minutes to complete 10 questions in each quiz and allowed to use your notes and text. **No makeups for any missed lecture quizzes for any reason.**

Schedule

Important Dates

Last day to add classes	January 29
Last day to drop with no tuition penalty	January 29
Selective Withdrawal Period	February 26 – March 30

See <http://registrar.gmu.edu/calendars> for more information.

Religious Holidays

A list of religious holidays is available on the [University Life Calendar page](#). Any student whose religious observance conflicts with a scheduled course activity must contact the Instructor **at least 2 weeks in advance** of the conflict date in order to make alternative arrangements.

Attendance Policy

Students are expected to attend each class, to complete any required preparatory work and to participate actively in lectures, discussions and exercises. As members of the academic community, all students are expected to contribute regardless of their proficiency with the subject matter.

Students are expected to make prior arrangements with Instructor if they know in advance that they will miss any class and to consult with the Instructor as soon as possible if they miss any class without prior notice. **Students who anticipate absences are discouraged from taking the class.**

Departmental policy requires students to take exams at the scheduled time and place, unless there are truly compelling circumstances supported by appropriate documentation. Except in such circumstances, failure to attend a scheduled exam will result in a score of zero (0) for that exam.. Students should not make travel plans or other discretionary arrangements that conflict with scheduled classes and/or exams. If the University is closed due to weather or other unforeseen conditions, final exams may be rescheduled. Contact the instructor in advance if you have a

serious problem that prevents you from meeting course requirements.

Classroom conduct

Students are expected to conduct themselves in a manner that is conducive to learning, as directed by the Instructor. Any student who negatively impacts the opportunity for other students to learn will be warned – if disruptive behavior continues, the student will be asked to leave the classroom.

Electronic devices are potential distractions in the classroom environment. Cell phones, pagers and other handheld devices must be turned off or set to "silent" mode and not used while class is in session. Laptop computers and similar devices may be used only if such use is directly related to the classroom activity in progress – for some activities the Instructor may require that such devices not be used in order to maximize student engagement.

Communications

Registered students will be given access to a section of [the Blackboard Learning System](#) for this course. Blackboard will be used as the primary mechanism (outside of lectures) to disseminate course information, including announcements, lecture slides, homework and other assignments, and scores for homework and exams.

Communication with the Instructor on issues relating to the individual student should be conducted using GMU email, via telephone, or in person - **not** in the public forums on Blackboard. Email is the preferred method. Federal privacy law and GMU policy require that any communication with a student related in any way to a student's status be conducted using secure GMU systems – if you use email to communicate with the Instructor you **MUST** send messages from your GMU email account.

Lecture slides are complements to the lecture process, not substitutes for it - access to lecture slides will be provided in Blackboard as a courtesy to students provided acceptable attendance is maintained.

All course materials (lecture slides, assignment specifications, *etc*) are published on Blackboard. This allows users of most computing platforms to view and print these files. Microsoft® Word (or a compatible word processing application) is required for preparing assignments – it is available on computers in the Mason open labs.

Privacy

Instructors respect and protect the privacy of information related to individual students. As described above, issues relating to an individual student will be discussed via email, telephone or in person. Instructors will not discuss issues relating to an individual student with other students (or anyone without a need to know) without prior permission of the student.

Assessable work will be returned to individual students directly by the Instructor (or by a faculty or staff member or a Teaching Assistant designated by the Instructor, or via another secure

method). Under no circumstances will a student's graded work be returned to another student. Faculty and staff will take care to protect the privacy of each student's scores and grades.

Disability Accommodations

[The Office of Disability Services \(ODS\)](#) works with disabled students to arrange for appropriate accommodations to ensure equal access to university services. Any student with a disability of any kind is strongly encouraged to register with ODS as soon as possible and take advantage of the services offered.

Accommodations for disabled students **must** be made in advance – ODS cannot assist students retroactively, and at least one week's notice is required for special accommodations related to exams. Any student who needs accommodation should contact the Instructor during the first week of the semester so the sufficient time is allowed to make arrangements.

Honor Code

All members of the Mason community are expected to uphold the principles of scholarly ethics. Similarly, graduating students are bound by the ethical requirements of the professional communities they join. The ethics requirements for some of the communities relevant to IT graduates are available via the following links:

- [ACM Code of Ethics and Professional Conduct](#)
- [IEEE Code of Ethics](#)
- [EC-Council Code of Ethics](#)

On admission to Mason, students agree to comply with the requirements of the [Honor Code](#) at George Mason University. Student members of the George Mason University community pledge not to **cheat**, **plagiarize**, **steal**, and/or **lie** in matters related to academic work. The Honor Code will be strictly enforced in this course.

Any use of the words or ideas of another person(s), without explicit attribution that clearly identifies the material used and its source in an appropriate manner, is **plagiarism** and will not be tolerated. The Instructor reserves the right to use manual and/or automated means (including such services as [Turnitin.com](#)) to detect plagiarism in any work submitted by students for this course, and to direct Teaching Assistants and/or other faculty and/or staff members to do likewise in support of this course.

WARNING! This course has a zero tolerance policy for violations of the Honor Code. There are no second chances. Offenses carry the following minimum recommended sanctions:

Level 1 Offenses, such as cheating on an assignment (working together when not allowed)

1st Offense: 0 on the assignment, one letter grade (10%) reduction in the final grade, and the academic integrity seminar

2nd Offense: F in the course, and one semester academic suspension

3rd Offense: F in the course and expulsion from the University

Level 2 Offenses, such as cheating on an exam, posting to a website for a partial or

completed solution to an assignment (chegg.com, homeworkmarket.com, rentacoder.com, etc.)

1st Offense: F in the course and the academic integrity seminar

2nd Offense: F in the course, and one year academic suspension

3rd Offense: F in the course and expulsion from the University

For this course, the following requirements are specified:

- All assessable work is to be prepared by the individual student, unless the Instructor explicitly directs otherwise.
- All work must be newly created by the individual student for this course for this semester. Any usage of work developed for another course, or for this course in a prior semester, is strictly prohibited without prior approval from the instructor.

Class Rules

- No eating or drinking permitted!
- Turn off all pagers and phones!
- Class-related work only!