

Course Syllabus

Web-Based Applications & Electronic Commerce BIT 5594

Contact Information

- Professor: Dr. Parviz Ghandforoush (pghandfo@vt.edu (<mailto:pghandfo@vt.edu>)
(<mailto:wbaker@vt.edu>))
- Instructor: Chris Durham (cfdurham@vt.edu (<mailto:cfdurham@vt.edu>))
- Instructor: Jessica Bush (jlbusch@vt.edu (<mailto:jlbusch@vt.edu>))
- Live Sessions/Office Hours: **Wednesday 5:30-6:30 pm ET** (via Zoom webinar)

Zoom Meeting Info:

Join Zoom Meeting

<https://virginiatech.zoom.us/j/81225419874?pwd=NEpQSHE5UmNpU0Zuemt0QzdoN3lxdz09>
(<https://virginiatech.zoom.us/j/81225419874?pwd=NEpQSHE5UmNpU0Zuemt0QzdoN3lxdz09>)

Meeting ID: 812 2541 9874

Passcode: 83015

Course Catalog Description

An examination of the concepts, technologies, and applications of electronic commerce. Topics include the World Wide Web as a platform for electronic commerce; intranets; electronic data interchange; electronic banking and payment systems; security and firewalls; software agents; and the social, legal, and international issues of electronic commerce. Must be enrolled as an MIT student or have completed the first year of the MBA program courses.

Learning Objectives

The primary objective of this course is to provide students with the knowledge, skills, and technical information that is required of managers and entrepreneurs to succeed in the information economy. Particular emphasis will be placed on developing a web-based application to facilitate understanding of the processes and components that make up a website e-commerce business.

Students who successfully prepare for the Web-Based Applications and Electronic Commerce course will achieve a solid understanding of how entrepreneurs use the internet and its framework to develop businesses to market to a global audience by:

- Identifying the unique features and business models associated with e-commerce
- Investigating strategic applications of e-commerce with emphasis on existing companies

- Navigating a broad range of positioning strategies available within the e-commerce landscape
- Developing the ability to quickly and effectively research internet companies and strategies
- Understanding the economics of digital environments and what business models apply to which ventures, including freemium models and two-sided markets
- Understanding the behavioral foundation of various ecommerce business models, including Internet retail, subscription commerce, curated commerce, etc.
- Understanding the theory and practice of doing business over the internet and World Wide Web
- Understanding the elements of the infrastructure of electronic commerce
- Selecting and applying appropriate techniques to create solutions for business problems which could include systems, websites, or program development
- Describing an e-commerce business plan
- Explaining how businesses sell products and services on the web
- Describing the qualities of an effective web business presence
- Describing e-commerce payment systems

Course Textbook, Reading Material, and Software

- Laudon and Traver. **E-commerce: Business, Technology, Society 2017 (13th Ed)** Pearson (Boston). (Required)
- Ries, Eric (2011). **The Lean Startup**, Crown Business (New York). (Required)
- Rubin, Kenneth. **Essential Scrum: A Practical Guide to the Most Popular Agile Process**, 2012 Addison-Wesley Professional (**Available free on VT e-Library**)
 - <https://learning.oreilly.com/library/view/essential-scrum-a/9780321700407/>
(<https://learning.oreilly.com/library/view/essential-scrum-a/9780321700407/>)
- **Free Web-based Software** –WordPress/Wix, Mentimeter
- **Video Software/Hardware** – Video recording capabilities (e.g. webcam or smartphone) for video question responses
- **Respondus Lockdown Browser** software installation is required for Quizzes and the Final Exam. The software is available free via Canvas. The download is through Canvas quizzes - attempt Quiz 1 and you'll be prompted to download the software.
 - **OS requirements:**
 - Windows: 10 and 8. Details
 - Mac: MacOS 10.12 or higher.
 - iOS: 11.0+ (iPad only)
 - **Alternative to using Respondus software** – Schedule proctored sessions for the quizzes and final. The Virginia Tech Northern Virginia Center (<https://www.nvc.vt.edu/>) can assist in coordinating proctored sessions.

O'Reilly (VT Library) Access:

- If you have not accessed O'Reilly before, create an account using the following link

- <https://learning.oreilly.com/library/view/temporary-access>
(<https://learning.oreilly.com/library/view/temporary-access>)
- Once you have account credentials, login using the following link
 - <https://www.oreilly.com/member/profile/> _(<https://www.oreilly.com/member/profile/>)
- If you have any issues, contact O'Reilly support: support@oreilly.com (<mailto:support@oreilly.com>)

Course Schedule

<u>Week:</u>	<u>Date</u>	<u>Topic</u>	<u>Assignment/Project/Quiz/Discussion</u>
1	May 23 – May 31	<u>E-commerce</u>	Read: <ul style="list-style-type: none"> - E-commerce Ch 1 & 2 Assignment: <ul style="list-style-type: none"> - Student Introductions & Quiz #1
2	June 1 – June 7	<u>Business Models & Plans</u>	Read: <ul style="list-style-type: none"> - Lean Startup Part 1 (Ch 1-7) Assignment: <ul style="list-style-type: none"> - Quiz #2 and Group Formation
3	June 8 – June 14	<u>Lean Startup & ICORP</u>	Read: <ul style="list-style-type: none"> - Lean Startup Part 2 (Ch 8-14) Assignment: <ul style="list-style-type: none"> - Assignment #1 Due
4	June 15 – June 21	<u>Web Sites and Apps</u>	Read: <ul style="list-style-type: none"> - E-commerce Ch 4 Assignment: <ul style="list-style-type: none"> - Quiz #3
5	June 22 – June 28	<u>Marketing</u>	Read: <ul style="list-style-type: none"> - E-commerce Ch 6

			Assignment: <ul style="list-style-type: none"> - Quiz #4
6	June 29 – July 5	<u>E-commerce Infrastructure</u>	Read: <ul style="list-style-type: none"> - E-commerce Ch 3 Assignment: <ul style="list-style-type: none"> - Assignment #2 Due
7	July 6 – July 12	<u>Intro to Agile/Scrum</u>	Read: <ul style="list-style-type: none"> - Essential Scrum Ch 19, 20, & 21 Assignment: <ul style="list-style-type: none"> - none
8	July 13 – July 19	<u>More Agile/Scrum</u>	Read: <ul style="list-style-type: none"> - Essential Scrum Ch 1, 2, & 14 Assignment: <ul style="list-style-type: none"> - Assignment #3 Due
9	July 20 – July 26	<u>Security</u>	Read: <ul style="list-style-type: none"> - E-commerce Ch 5 Assignment: <ul style="list-style-type: none"> - Quiz #5
10	July 27 – August 2	<u>Social Networks, Auctions, and Portals</u>	Read: <ul style="list-style-type: none"> - E-commerce Ch 11 Assignment: <ul style="list-style-type: none"> - Sprint #1
11	August 3 – August 9	<u>Ethical, Social, and Political Issues and WP Testing</u>	Read: <ul style="list-style-type: none"> - E-commerce Ch 8

			Assignment: <ul style="list-style-type: none"> - Sprint #2 - Final Project Due
12	Aug. 12 (6:30pm-8:30pm ET)	<u>Final Exam</u>	Final Exam: Friday, August 12 from 6:30pm to 8:30pm ET

Assessment

Weekly Discussions	5%
Periodic Quizzes	15%
Assignments	25%
E-commerce (final group project)	25%
Final Exam	30%

Discussions:

Discussion topics are assigned weekly. Students should research and post responses, and also engage in conversation with other students.

Discussion grading is broken down into 2 parts:

- **Content:** Discussion responses should provide insightful content that contributes to knowledge sharing. Additionally, information submitted to Menti should be included at the bottom of each discussion post (e.g., when keyword “Wix” is submitted to Menti, including “Menti Submission: ‘Wix’” at the bottom of your discussion post).
- **Menti Submission:** Each weekly discussion will include one or more requests for high-level information related to your discussion post. We will use this data to drive class discussions and present aggregate information.

Quizzes:

Anything from the required readings is fair game for the quizzes. Readings characterized as “optional” throughout the semester will not be quizzed. Quizzes will be taken via Respondus Lockdown Browser software.

Assignments:

There are three main assignments over the course of the semester, plus an initial group formation mini assignment towards the beginning of the course. These assignments are group assignments and include requirements for video submissions and slide decks.

Final Project (aka E-commerce Website):

The Final Project is a group assignment. Groups will create an E-commerce Website following a Scrum methodology. More information will be made available throughout the course.

Groups:

Group formation and group work is required for assignments and the Final Project. A Group Formation discussion established in Canvas is the primary method for finding team members. Group sizes are as follows:

- Assignments – 2 or 3 people
- Final Project – 3 or 4 people

Groups are student-formed and organized and must be established in the appropriate assignment tab on the Canvas > People page. NOTE: Establishing your group in Canvas is required for each assignment, even if you have the same partner throughout the semester. Changing partners between assignments is allowed so long as students coordinate with both existing and future group members. Failure to join a group and failure to establish a group in Canvas may result in point deductions for an assignment.

Assignment and Final Project Grading:

Assignment/Final Project grades are determined based on the quality of content submitted. Meeting the basic requirements of an assignment (i.e., answering each question) may result in a B or lower if submitted content is not well articulated, thoroughly sourced, and/or adequately presented. At least 10 percent of each assignment and the Final Project will be awarded subjectively based on professionalism, aesthetics, detail, and other means that portray that a student has gone above and beyond his/her peers.

An assignment will receive an A grade if:

- All basic requirements are met
- Research and sources support statements/answers provided
- Submissions expand upon research to present new ideas and perspectives
- Submissions are presented in a highly professional format (i.e., submission is something you would submit to a boss and/or client at work)

Perfect scores are reserved for assignments or projects that go above and beyond relative to peer submissions. Thus, there is some amount of subjectivity and relativity in the scoring process, which reflects how projects are evaluated in professional, competitive settings.

Final Exam:

The final exam will be accessed through Canvas via Respondus Lockdown Browser software. Students are advised to take the final exam on the scheduled final exam date of **Friday, August 12 from 6:30pm to 8:30pm ET**. No makeup exam will be approved and administered except for emergencies supported with appropriate official documentation. Missing the final exam due to personal or work-related travel is not acceptable.

Grades

All assignments receive a numeric grade. Your final grade will be converted to a letter grade according to the table below. Percentages will not be rounded up to the next letter grade.

Grades			
A 93-100%	A- 90-92.99%	B+ 87-89.99%	B 83-86.99%
B- 80-82.99%	C+ 77-79.99%	C 73-76.99%	C- 70-72.99%

Course Evaluation (SPOT)

Course evaluations for this class will be administrated online toward the end of the semester. Your feedback is important. Please take the time to complete the evaluation online. **You will be awarded an additional 1% on the final course grade for completing the SPOT evaluation. No additional points will be given if the completed evaluation is not submitted on time.**

Participation

Participants in this course should expect to spend approximately 7-10 hours per week involved in activities related to this course.

Late Assignments

Extensions on due dates for weekly activities must be made well in advance for an excused absence.

Students must notify instructors (Chris Durham and Jessica Bush) of their need for an excused absence and coordinate with instructors to establish a timeline for submission.

If circumstances prevent participation or timely completion of an assignment, students must contact an instructor to arrange for adjustments in the assignment or schedule in advance of the due date and not after the due date has already passed.

Honor Code

We are bound by the Graduate Honor Code. Please visit the [Graduate School Honor System's webpage](http://graduateschool.vt.edu/academics/expectations/graduate-honor-system.html) [\(http://graduateschool.vt.edu/academics/expectations/graduate-honor-system.html\)](http://graduateschool.vt.edu/academics/expectations/graduate-honor-system.html) for specific information regarding expectations and policies related to the Graduate Honor Code.

Special Needs

Any student who feels that he or she may need an accommodation because of a disability (learning disability, attention deficit disorder, psychological, physical, etc.) should contact the Virginia Tech Services for Students with Disabilities (SSD) office (<http://www.ssd.vt.edu/> [\(http://www.ssd.vt.edu/\)](http://www.ssd.vt.edu/)) at 540-231-3788 to schedule a confidential consultation or register with documentation.