BCIS 4720 – Web Based Information Systems

INSTRUCTOR:	Dr. John Windsor
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OFFICE HOURS:	MW 4:00-5:00 and By appointment
SEMESTER:	Fall Semester 2015

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3 hours. This course provides tools, skills, and an understanding of technology, business concepts and issues that surround the emergence of web based information systems. In addition to acquiring basic skills for navigating the Internet and creating a personal electronic presence of the World Wide Web (WWW), the student will develop an understanding of the current practices and opportunities in electronic publishing, electronic shopping, electronic distribution, and electronic collaboration. The student will also explore several of the problem areas in electronic commerce such as security (authentication, privacy), encryption, safeguarding or intellectual property rights, acceptable use policies, and legal liabilities.

The course uses a combination of lectures, classroom demonstrations, self-learning, guest speakers, and project work. Web experience is not required, although completion of the Basic Information Systems course (BCIS 3610) and an introduction to programming course (BCIS 3630) is required. Since this course is end-product focused, the instructor expects you to put into practice the organizational, design, and software skills learned in previously completed BCIS courses. If you have completed BCIS 4650, you will benefit from the user interface design and software skills taught in that class as well as in BCIS 3615. A willingness to experiment with and explore all of these technologies is necessary.

TEXTBOOKS (REQUIRED):

Schneider, Gary. *Electronic Commerce*, Eleventh Edition. Thomson Course Technology (2013), ISBN 978-1-285-42543-6.

Boehm, Ann, *Murach's ASP.NET 4.5 Web Programming with C#* 2012. Mike Murach & Associates, Inc. (2013), ISBN 978-1-890774-61-5).

SOFTWARE

You will use Microsoft Visual Studio 2015 Professional or Visual Studio 2013 Premium (in the CoB labs or elsewhere) and SQL Server 2014 (on the ATLAS and MIMAS severs; VS 2015 Professional and VS 2013 Premium comes with SQL Server Express. If you decide to experiment with this version, download the free SQL Server Management Studio (VERY helpful) from Microsoft at http://www.microsoft.com/en-us/download/details.aspx?id=8961; Shortly after the start of the term, you will also have access to the online Microsoft Store (https://e5.onthehub.com/WebStore/), where you can purchase VS 2015 Pro or VS 2013 Premium for a reduced price plus shipping. **DO NOT USE VISUAL STUDIO 2008, 2010, or 2012 IN THIS COURSE. DO NOT USE MS SHAREPOINT DESIGNER, EXPRESSIONS WEB, OR ADOBE DREAMWEAVER IN THIS COURSE. DO NOT USE ANY OTHER WEB PAGE DEVELOPMENT SOFTWARE IN THIS COURSE WITHOUT INSTRUCTOR PERMISSION.**

Course Objectives AND (METRICS)

Upon completing this course the student should:

- Have a general understanding of the Internet and related technologies (Exam and Projects).
- Have built Web pages using Visual Studio ASP.NET at least at a basic level (Projects).
- Be able to analyze the strengths and weaknesses of an Electronic Commerce site (Exam and Projects).
- Have built a prototype Electronic Commerce site for a company (Project).
- Be able to specify the development of Electronic Commerce capabilities in a company (Exam and Projects).
- Have an understanding of electronic commerce and the interplay between technology, managerial and policy issues that will shape its future (Exam and Projects).
- Recognize and understand ways of using Electronic Commerce technologies to improve intra and inter-organizational processes (Exam).

- Be able to analyze the impact that Electronic Commerce is having and will likely have on key sectors of the economy and assess the strategic implications this analysis holds for an organization (Exam).
- Have an understanding of policy issues related to privacy, content selection, intellectual property rights, and establishing identity that are germane to Electronic Commerce (Exam).

SEMESTER SCHEDULE

BLUE = PERSONAL ASSIGNMENT; GREEN = TEAM ASSIGNMENT)

All assignments are due on the respective date shown below.

CLASS	DATE	TOPIC	READINGS
1	August 26	Introduction: Course Overview What is Electronic Commerce **Team Formation & Name**	Schneider 1, 2
2	Sept. 2	Website Design More About E-Commerce **Evaluation Site Selected**	Schneider 3, 4
3	Sept. 9	.NET Environment Project Requirements Server and Rich Controls **Personal Web Site Using CSS and Master Page Technology**	Boehm 1, 2, 3, 4

		First Project Plan Due (update weekly thereafter!)	
4	Sept. 16	E-Business Strategies (Finance & Legal) Server and Rich Controls **Business Proposal Due** **Site Evaluation Due**	Schneider 5, 6, 7 Boehm 5, 6, 9
5	Sept. 23	E-Business Technologies (Hardware) Programming in .NET **Challenge/Response Page**	Schnieder 8 Boehm 7, 8, 10
6	Sept. 30	E-Business Technologies (Software) Database Processing **Final Business Plan Due** **Input Validation**	Schnieder 9 Boehm 11, 12, 13
7	Oct. 7	Database Processing **Read from a Database** **Design Documentation Due**	Boehm 14, 15
8	Oct. 14	**Mid-Term Quiz (covers only Schnieder)**	
9	Oct. 21	Database Processing	Boehm 15, 16
10	Oct. 28	Database Processing **Write to a Database**	
11	Nov. 4	Electronic Commerce Security Portals & Web Parts	Schnieder 10 Boehm 17, 18

12	Nov. 11	Payment Systems **Update a Database**	Schnieder 11 Boehm 20, 21, 22
13	Nov. 18	Planning for Electronic Commerce **Video of Business and Site Presentation Due***	Schnieder 12 Boehm 23, 24
14	Nov. 25	Planning for Electronic Commerce **Create/Use a Web Service**	
15	Dec. 2	Team Presentations **E-Commerce Site Due**	
	Dec. 9	**Final Quiz 6:30-8:30 PM (covers only ASP.NET 4 material; and Chapters 10, 11, 12 from the Schnieder text)**	

LIST OF PERSONAL ASSIGNMENTS

Modifications to the course schedule and changes in assignments may be made at the instructors discretion.

Each student will have a personal web site on ATLAS.ITDS.UNT.EDU. Post all individual assignments to your personal site. Post all team assignments to your team site. Then email the assignment's complete URL to the instructor (john.windsor@unt.edu) with BCIS 4720 in the subject line. The date and time stamp of your email determines whether or not your assignment is in on time. Further, take steps to ensure that the

instructor has received your message, since I will assume that if I do not receive your email you did not send it. Assignments are due in my e-mail by midnight on the Friday after the due date. Late assignments cannot earn more points than the lowest grade of an assignment turned in on time. Assignments that have not been recieved by Monday morning will receive a grade of zero (0). Assignments that have not been graded will show as -1.

Web Site with Master Page/Cascading Style Sheet (CSS) -

Create a web site to identify yourself to perspective employers. This site will conform to the requirements presented during the first class meeting. You must use space provided on the ITDS Department's server. ***DUE WEEK 3 (SEPTEMBER 9).***

Evaluation of an Electronic Commerce Site -

Each student will select a different electronic commerce site (i.e., a "primary business" site, not a 3rd-party site like Google), subject to instructor approval (a simple or complex web site does not automatically qualify). No duplications permitted. ***DUE WEEK 2 (SEPTEMBER 2)****.*

Using information provided in Schnieder and in class, analyze this site for its design strengths and weaknesses. NOTE that you must evaluate ALL of the site's pages. Submit a written report (double-spaced, using MS Word, and saved in PDF format) detailing your findings. You will use a 7-point Likert scale for part of the evaluation. NOTE that it is in your best interest to CLEARLY EXPLAIN AND JUSTIFY IN WRITING each required item in the assessment, since those grading your work will be evaluating it using their professional opinions. ***DUE WEEK 4 (SEPTEMBER 16).***

Challenge/Response Web Page -

This is an ASP.NET assignment requiring the use of code-behind. Create at least 2 web pages, the second (the "response") accessible only upon successful completion of the first (the "challenge" -- a login page with UserID and PW) Assume the user will enter the challenge data correctly. In this activity, create/use either a session state variable or an application state variable. ***DUE WEEK 5 (SEPTEMBER 23).***

Input Validation -

This is an ASP.NET assignment requiring the use of code-behind. Create a User Registration Page to test user input. There is ***no*** *requirement to use* ***every*** *validation control. But you do have to validate all fields in the form and satisfy all stated requirements. Validation requirements will be discussed in class.* ***DUE WEEK 6 (SEPTEMBER 30).***

Read from a Database -

This is an ASP.NET assignment requiring the use of code-behind. You are to practice reading from a SQL Server database (STUDENT4720). Create a page containing a TextBox for User Name and Password. The page should verify the user is in the USER Table of the Database, and report the Email Address and Year of Birth of the user. If the user is not in the database control should be transferred to a page reporting the problem and inviting the user to register with the site. ***DUE WEEK 7 (OCTOBER 7).***

Write to a Database -

This is an ASP.NET assignment requiring the use of code-behind. Create a new web page that will allow a client to register on a site. The registeration information should be written to the USER table in the STUDENT4720 database. The test of the page should be the ability of the new user to "login" to the website. ***DUE WEEK 10 (OCTOBER 28).***

Update a Database -

This is an ASP.NET assignment requiring the use of code-behind. Create a new page that will allow a client found in the USER table to modify any of the information about themself found in the USER table. ***DUE WEEK 12 (NOVEMBER 11).***

Use a Web Service -

This is an ASP.NET assignment. ***DUE WEEK 14 (NOVEMBER 25).***

LIST OF TEAM ASSIGNMENTS

There are more details about many of these assignments at http://dione.itds.unt.edu/bcis4720/, where you may need to login to access the Milestones. Modifications to the course schedule and changes in assignments may be made at the instructors discretion.

Each student will have a personal web site on ATLAS.ITDS.UNT.EDU. Post all individual assignments to your personal site. Each team will have a web site on ECOM.UNT.EDU. Post all team assignments to your team site. Then email the assignment's complete URL to the instructor (john.windsor@unt.edu) with BCIS 4720 in the subject line. The date and time stamp of your email determines whether or not your assignment is in on time. Further, take steps to ensure that the instructor has received your message, since I will assume that if I do not receive your email you did not send it. Assignments are due in my e-mail by midnight on the Friday after the due date. Late assignments cannot earn more points than the lowest grade of an assignment turned in on time. Assignments that have not been recieved by Monday morning will receive a grade of zero (0). Assignments that have not been graded will show as -1.

TEAM ASSIGNMENTS:

Team Formation & Name -

Pick your members, 3 persons per team. Each team submits their group name, which will become a web site where the team posts their assignments. ***DUE IN CLASS WEEK 1 (AUGUST 26).***

Each student team will develop a prototype electronic commerce site for a ***sustainable*** *business that will address environmental issues, subject to UNT regulations, and* ***instructor approval.*** *Use of sound or animation is optional. Clearly mark your site as a class project! Team activities include all of the following:*

Project Plan -

Each team will develop a project plan using MS Project for their proposed e-commerce site. Submit the initial plan on Week 3 and ***update weekly*** *until the project is complete on Week 14. Remember this is a "work" schedule and each report should reflect the work planned as well as the work completed.* ***FIRST DUE WEEK 3 (SEPTEMBER 9).***

Business Proposal -

Each team will develop a business proposal (pdf) for their electronic commerce site. This proposal will include the business case, financing needs and projected cash flow for the company. It will also include a discussion

about why this business is appropriate for an Internet implementation (look at Milestone 2). NOTE that all of this needs to be carefully thoughtout. ***DUE WEEK 4 (SEPTEMBER 16).***

Based on feedback from me, you are to prepare your final Business Plan (pdf) (look at Milestone 3). ***DUE WEEK 6 (SEPTEMBER 30).***

Electronic Commerce Site Design Documentationn -

Each team will prepare full system design documentation, including site navigation and screen designs for the electronic commerce site (paste screen captures into MS Word, with both display areas and user-activated functionalities numbered and clearly described). ***DESIGN PROPOSAL (pdf) DUE WEEK 7 (OCTOBER 7), FINAL DOCUMENTATION (pdf) DUE WEEK 15 (DECEMBER 2) .***

Video of Business and Site demonstration -

Each team presents their work in a video (.wmv) to the rest of the class and an evaluation team. Assume that the audience consists of fellow software engineers (who may not know much about your topic) who are critiquing your team's work before presentation to the client. Include in your talk:

1. *A brief introduction about the nature of the project;*
2. *Constraints or difficulties encountered and solutions used (be specific); if your application uses other software, explain as needed (note that "lack of time" is never an acceptable constraint or excuse!);*
3. *A critical analysis of your project's strengths and weaknesses;*
4. *A realistic version 2 proposal; and*
5.. *A demonstration of your application.*

The video should not be a team member "talking to the camera." The video should be at least 4 minutes but may not exceed 7 minutes. The organization and content of your material, impact your grade. I expect you to apply your BCIS 3615 knowledge and skills in this presentation. Professional dress is optional and not a grade issue. ***DUE WEEK 13 Tuesday Night NOT Friday (NOVEMBER 18).***

Prototype of an Electronic Commerce Site -

Again, clearly mark your site as a class project! The instructor will provide details of the design requirements in class. ***DUE WEEK 15 (DECEMBER 2).***

Final Presentation –

Based on the video presented in week 12, three teams will be selected by an evaluation team to present to the class. These teams will compete in the BCIS CASE COMPETITION. The students in the class will have a vote in the ranking of the teams. All teams are expected to use PowerPoint and/or other presentation aids. Give the instructor a copy of the PPT handout and what-ever other documents you would want the client to see during your talk; handouts for the rest of the class are optional. Assume a maximum of 30 minutes; organize your time as you see fit (ex., 10 min. talk, 10 min demo, 10 min Q&A; 5 min talk, 15 min. demo, 10 min. Q&A, etc.). Your skill as a public speaker, as well as the organization and content of your material, impact your evaluations. I expect you to apply your BCIS 3615 knowledge and skills in this oral. Professional dress is optional. ***DUE WEEK 15 (DECEMBER 2).***

Grading Policy

Post all individual assignments to your personal site. Post all team assignments to your team site. Then email the assignment's complete URL to the instructor (john.windsor@unt.edu) with BCIS 4720 in the subject line.

The date and time stamp of your email determines whether or not your assignment is in on time. Further, take steps to ensure that the instructor has received your message, since I will assume that if I do not receive your email you did not send it.

Assignments are due in my e-mail by midnight on the Friday after the due date. Late assignments cannot earn more points than the lowest grade of an assignment turned in on time. Assignments that have not been recieved by Monday morning will receive a grade of zero (0). Assignments that have not been graded will show as -1.

SEMESTER GRADE BREAKDOWN:

MID-TERM QUIZ	20%
FINAL QUIZ	20%

INDIVIDUAL ASSIGNMENTS	20%
Your Site	2%
Challenge/Response	2%
Input Validation	2%
Site Evaluation	2%
Read from a Database	2%
Write to a Database	4%
Update a Database	4%
Use a Web Service	2%
PROTOTYPE OF SITE	40%
Project Plans	5%
Design Documentation	5%
Business Plan	6%
Final Documentation	5%
Video Presentation	5%
Site Operation	14%
Grand Total	100%

PLEASE NOTE: THERE IS *NO* EXTRA CREDIT.

Course Policies

SUBMISSIONS.

Assignments are due in the instructor's e-mail by midnight the Friday after class due date. Except when noted in class, the due date is the Friday after class the assignment is due. Assignments will not be accepted and will receive a grade of zero (0) the following Monday morning. The instructor will define the assignments sufficiently in advance of their due dates to allow students adequate time for their completion. Consequently, there is no allowance for computer failure and/or downtime, printer delay, or whatever else may occur. Turn in whatever you have by the scheduled time for any partial credit you may have earned. All successful companies expect business professionals to schedule their work efficiently and to allow for unexpected failures (i.e., contingency planning). The instructor will report assignment grades at the class website. **All website grades are unofficial**. If you discover what you believe to be an error in your grade, notify the instructor at once. Once final grades are recorded, they will not change unless you discover an error in the calculation process.

The mid-term quiz will be 90 minutes in length. Additionally, there may be a comprehensive quiz at the end of the semester for any quiz missed for

validated reasons of illness or death in the immediate family. The instructor will schedule this quiz (if needed) at his convenience during final exam week. Any curve applied to the regularly scheduled quizes does NOT apply to the comprehensive exam, which will not have any curve.

As per UNT policy, the grade of "I" may not be assigned except for appropriately documented emergencies (illness or death) and then only within the guidelines of stated University policy.

JOB PERFORMANCE AND TEAM DYSFUNCTION.

Working together in project teams is an integral part of the BCIS Department's curriculum. As such, it is also an integral part of this course. It is your responsibility to work diligently and harmoniously with all the other members of your team. Likewise, it is in the team's best interest to resolve all job performance problems internally. However, if these internal efforts fail, the result is a dysfunctional team.

If the team leader, or two or more members, decides that the team has become dysfunctional because of a member's poor job performance, s/he must prepare a written report for the instructor describing the nature of the performance problem, and the team's efforts to resolve it. Attach evidence as needed in support. Personality conflicts are not grounds for firing a team member.

The instructor will schedule a meeting of the entire team to discuss the performance problem and to mediate a solution. If a solution is not found the team can, by majority vote, fire the member for poor job performance. A fired member cannot do the semester project alone. He or she must join another team. If a fired student is unable to persuade another team to accept him/her, that student will either drop the course (with a grade of "WF") or receive (after the last day to drop) an "F" as the course grade (since teamwork is an integral part of this course). Keep in mind that firing a member does not lessen the central requirements of the team project, although the team might reduce peripheral elements (with instructor permission). Except for very extraordinary reasons, no team can resize to more than 4 members or less than 2.

AUTHORSHIP.

Each team member will participate equally in the software construction and debugging process. One of the ways I check for this is to look at the code's

documentation for evidence of who created and/or debugged what. If I fail to see any written record of your contribution to the software development, you can receive a ZERO for that part of the team project. Therefore document your authorship of everything you create!

MISCELLANEOUS.

Anyone retaking this class may not use code or any other materials they or their team developed in a prior class. Violations of this policy constitute unethical conduct (see below).

ABSENTEEISM.

I expect prompt and regular class attendance from all students. An "absence" is defined as missing all of a class, or part of a class either before or after a class break. If you have more than three unexcused absences from class, I reserve the right to drop you from the course with a grade of WF. Time conflicts caused by work schedules or other outside activities do not constitute an official excuse from attending class – or from meeting your project team obligations. I encourage you to submit assignments early or have a friend deliver your work for you if it becomes necessary.

CELL PHONES AND PAGERS.

When these devices "sound-off" during class, they greatly disrupt the learning process. Consequently, you are not to have cell phones or pagers turned on during class time. If one of these devices "sounds-off" during class time, I will tell the student to leave the class (with an unexcused absence and forfeiting any portion of grade available to be earned on that day) and see the CoB Dean of Students about the problem. Continual disruptions of class by the same student will result in permanent removal of the student from class and a report to the CoB Dean of Students (who may take additional disciplinary action). If you have a genuine emergency on a given day that requires use of these devices during class time, discuss the matter with the instructor in advance to obtain an appropriate policy.

LAPTOP COMPUTERS, TABLETS AND PDAs.

If you use them for taking notes in this class, that is fine. But you are not to use them to check email, do work for other classes, play games, etc. Do so, take you device and hold it until class is completed. For repeated offenses I will ask you to leave the class (with an unexcused absence and

forfeiting any portion of grade available to be earned on that day) and see the CoB Dean of Students about the problem. You attend class to learn, not to fill a seat to avoid an unexcused absence.

ETHICAL BEHAVIOR IN ITDS CLASSES.

The ITDS Department expects its students to behave at all times in an ethical and legal manner. There are at least two reasons for this. First, ethical behavior affirms the personal value and worth of the individual. Second, both IT and Decision Science professionals frequently handle confidential information on behalf of their employers and clients. Thus employers of BCIS and DSCI graduates expect ethical conduct from their employees because that behavior is crucial to the success of the organization.

Academic dishonesty is a major violation of ethical and legal behavior. The ITDS Department defines academic dishonesty as claiming the work of others as your own, or using illegal or unapproved means to raise your grade in a class. Examples include: copying answers from another person's paper; using unapproved notes during an exam; copying computer code from another person's work; having someone else complete your assignments or take tests on your behalf; stealing code printouts, software, or exams; recycling assignments submitted by others in prior or current semesters as your own; and copying the words or ideas of others from books, articles, reports, presentations, etc. for use as your own thoughts without proper attribution (i.e., plagiarism). It does not matter whether you received permission from the owner of the copied work; claiming the material as your own is still academic dishonesty.

The ITDS Department believes it is very important to protect honest students from unfair com-petition with anyone trying to gain an advantage through academic dishonesty. Consequently, there will be in-class testing to validate all major assignments you complete out of class. This may be accomplished by examination, oral reports, individual interviews or any other means your professor may deem appropriate. You must pass these validation tests with a grade of "C" or better to have your out-of-class work count in your term grade. Further, the student grade for academic dishonesty in ITDS classes is an immediate "F" for the course involved and referral of the case to the CoB Academic Advising Office.

UNETHICAL CONDUCT.

Unethical personal conduct or inappropriate use of University computing resources will result in a failing grade for the course and reporting the case to UNT.

AMERICAN WITH DISABILITIES ACT (1992).

The College of Business Administration complies with this Act in making reasonable accommodation for qualified students with disability. If you have an established disability as defined by this Act and would like to request an accommodation, please see the instructor as soon as possible (see page 1 of this syllabus for contact in-formation). Note: University policy requires that students notify their instructor within the first week of class if they need an accommodation. If you experience a temporary physical disability during the term, please contact the COBA Dean of Students for appropriate assistance. Any student with a temporary or permanent disability must still complete all course requirements.