Course Syllabus

CPSC 6176 Enterprise Web Application Development
(Online)

Last Updated: March 20, 2014

Instructor
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Office: CCT 441
Office Hours: By appointment

Contacting Me: For issues related to this course, please email me within CougarView. If you need to discuss something with me personally, please contact me through CougarView, my CSU email address or my cell phone.
Office Phone: (706) 507-8181
Department Phone: (706) 507-8170
Department Fax: (706) 565-3529

Required Textbooks

Title: Information Architecture for the World Wide Web: Designing Large-Scale Web Sites, 3rd Edition
Authors: Peter Morville, Louis Rosenfeld
Publisher: O’Reilly & Associates
Year: 2007

Title: Professional ASP.NET 4.5 in C# and VB
Authors: Gaylord, Wenz, Rastoqi, Miranda, and Hanselman
Publisher: John Wiley & Sons, Inc.
ISBN: 978-1118311820
Year: 2013

Student Data Files:
http://www.wrox.com/WileyCDA/WroxTitle/Professional-ASP-
You must purchase the "required" textbooks for the course. Purchasing the recommended reading textbooks is optional.

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**Recommended Reading**

**Title:** Ambient Findability  
**Author:** Peter Morville  
**Publisher:** O'Reilly & Associates  
**Year:** 2005

**Title:** Web Usability: A User-Centered Design Approach  
**Author:** Jonathan Lazar  
**Publisher:** Addison-Wesley  
**ISBN-10:** 0-321-32135-9  
**ISBN-13:** 978-0321321350  
**Year:** 2006

**Title:** Philip and Alex's Guide to Web Publishing  
**Author:** Philip Greenspun  
**Online:** [http://philip.greenspun.com/panda/](http://philip.greenspun.com/panda/)

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**Course Description**

CPSC 6176 Enterprise Web Application Development is an online graduate course intended for computer science students and professionals who have already acquired a basic background in distributed software architecture, project and resource management, business requirements, fundamentals of Web technologies, DHTML and
client-side scripting, Java applets, and Active X controls.

The objective of the course is to introduce students to the concepts of enterprise Web application development. The platform used this semester will be ASP.NET in conjunction with C# and VB.NET. The course's focus will be on the information architecture aspect of designing large-scale Web sites and the use of ASP.NET 4.5 in applying this design.

The course will stress not only learning how to create enterprise Web applications but also how to develop the knowledge and skills necessary to create enterprise Web applications in practice.

Course Objectives

At the completion of this course, students will have an understanding of:

- the fundamental concepts that are critical to enterprise Web development
- the enterprise Web development process
- what information architecture is and how it can be used to develop large-scale Web sites
- enterprise-level Web security issues
- enterprise-level performance and optimization issues

In addition, upon completion of this course, students will be able to:

- use ASP.NET together with VB.NET or C# to create enterprise-level Web sites
- connect to and use data from databases using ADO.NET
- create and consume WCF services
- use ASP.NET debugging techniques
- implement enterprise-level Web security using ASP.NET
- implement enterprise-level performance and optimization techniques using ASP.NET

Assessment Methods

Grades in this course will be based on the following assessments:

- Participation - 20%
- Weekly Quizzes - 10%
- Web development assignments - 30%
- Team Final Project Research & Proposal - 5%
- Team Final Project Strategy & Design - 10%
- Team Final Project Implementation and Documentation - 25%

In addition, the final project grades may be scaled according to individual assessments of team members.
Final grades will be assigned according to the following schedule:

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<thead>
<tr>
<th>Percentage</th>
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<tr>
<td>90 – 100</td>
<td>A</td>
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<td>80 – 89</td>
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<td>60 – 69</td>
<td>D</td>
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**How to Access the Course**

This course is being offered through **CougarView (D2L)**. You can access **CougarView** at:

http://cougarview.columbusstate.edu/

At this page, enter your CougarView login information and click on the "Login" button. Your CougarView username and password are the same as your CougarNet login.

If you try the above and CougarView will not let you in, please contact the [GeorgiaView D2L Help Center](http://cougarview.columbusstate.edu/) as given on the login page. You can also try the CSU helpdesk at 706-507-8199. If you are still having problems gaining access after a few days in the class, please e-mail me.

Once you've entered CougarView, you will see a list of courses you have access to which contains some combination of the phrases "CPSC 6176" and "Summer 2013." If you don't see this entry in the list, please e-mail me.

Once you have clicked on the course's name and accessed the particular course itself, you will find a home page with links to other sections and tools. The first thing you should do is read the "Welcome (read first)" information. This information will give you a feel for what's available in the particular CougarView classroom environment and explain in more detail how the course will work. Once you've read this information, please feel free to explore the other areas, particularly the Course Content and Discussions.
This course will consist of readings, discussion questions, weekly quizzes, programming assignments, and a final project. On a weekly basis, you will need to:

1. review the week's lesson (approx. one hour per week);
2. complete the weekly readings (approx. two hours per week);
3. submit responses to weekly discussion questions based on the readings (approx. two hours per week);
4. comment on other students' responses to the discussion questions (approx. one hour per week);
5. complete the weekly quiz; and
6. complete the programming assignments (approx. three hours per week).

In addition to the weekly requirements, you will need to:

7. work with your team to decide on and complete a final project, including a final project proposal and an analysis and design document (approx. one hour per week).

Expected workload: 10 hours per week

As a student in this course, you are responsible to:

- manage your time and maintain the discipline required to meet the course requirements,
- complete all readings,
- actively participate in weekly discussions,
- complete all weekly quizzes,
- complete and submit programming assignments,
- decide on and develop a final project,
- read any e-mail sent by the instructor and respond accordingly.

“I didn’t know” is not an acceptable excuse for failing to meet the course requirements. If you fail to meet your responsibilities, you do so at your own risk.

As your instructor in this course, I am responsible to:

- post weekly lessons outlining the assignments for the week;
- post weekly discussion questions;
- read all responses to discussion questions and comments to responses;
- actively participate in weekly discussions;
- grade discussion questions, comments, weekly quizzes,
programming assignments, and the final project deliverables and post scores within one week of the end of the week in which they are submitted; and
- read any e-mail sent by students and respond accordingly within 48 hours.

Although I will read every posted discussion question and response, I will not necessarily respond to every post.

Regularly participating in the class discussions and posting your responses to the discussion questions as early as possible is important. If you do not respond to discussion questions or comment on other students' responses for two or more weeks in a row, you may receive a WF. If an emergency prevents you from responding to discussion questions or commenting on other students' responses, please contact me to make alternative arrangements.

The following is the tentative schedule for the course. It is subject to change. A current schedule will be maintained in the CougarView calendar.

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATES</th>
<th>READINGs/TOPICs</th>
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| 1    | 6/16 - 6/23 | **Information Architecture**  
ASP.NET Fundamentals, Controls, Debugging, and Error Handling  
Chapters 1-7, 29 (debugging)  
Introduction to the .NET Framework, ASP.NET and Visual Studio .NET; HTML5 and CSS3 design with ASP.NET; ASP.NET Web forms; and ASP.NET server, HTML server, ASP.NET Web server, and validation controls; user and server controls; debugging and error handling. |
| 2    | 6/24 - 6/30 | **Part I. Introducing Information**  
Data Access and Providers  
Chapters 8-15  
Data binding, model binding, |
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<th>Architecture</th>
<th>Details</th>
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<td>querying with LINQ, entity framework, ASP.NET dynamic data, working with services, introduction to and extending the provider model.</td>
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<tbody>
<tr>
<td>6/24</td>
<td>Web Development Assignment #1 Due</td>
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<tr>
<td>3</td>
<td>7/1 - 7/7</td>
<td>Part II. Basic Principles of Information Architecture</td>
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<td>ASP.NET Features Chapters 16-20</td>
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<td>Working with master pages, site navigation, personalization, membership and role management, security.</td>
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<th>Team Final Project Research &amp; Proposal Due</th>
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<td>4</td>
<td>7/8 - 7/14</td>
<td>Part III. Process and Methodology</td>
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<td>Application State and Client-Side Development Chapters 21-27</td>
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<td>State management, caching, ASP.NET Ajax, Ajax control toolkit, jQuery, real-time communication, developing websites with mobile in mind</td>
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<tr>
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<th>Web Development Assignment #2 Due</th>
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<td>5</td>
<td>7/15 - 7/21</td>
<td>Part IV. Information Architecture in Practice</td>
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<td>Application Configuration and Deployment Chapters 28-33</td>
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<td>Configuration, debugging and error handling, modules and handlers, asynchronous communication, building global applications, packaging and deploying ASP.NET applications.</td>
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<th>Team Final Project Strategy &amp; Design Due</th>
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<td>7/22 - 7/28</td>
<td>Part V. Information Architecture in Additional ASP.NET Technologies Chapters 34-35</td>
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<td>7/22</td>
<td>Web Development Assignment #3 Due</td>
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<tr>
<td>7/29</td>
<td>Team Final Project Implementation &amp; Documentation Due</td>
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**Online Discussions/Participation**

To maximize your learning, you are expected to actively participate in the weekly discussions. This means posting responses to discussion questions, commenting on other students' responses, commenting on other students’ comments, and responding to comments made to your responses and comments.

To earn the maximum credit for participation each week, you must post a response to at least one of the weekly discussion questions by **Thursday** of each week and post at least one other comment to another student's response by **Saturday** of each week. The points you earn for these posts will be based on the timeliness and quality of the content of your posts; that is, the thoroughness, clarity, conciseness, and relevance to the discussion question and posts.

On alternating weeks (Weeks 2, 4, and 6), you will work with your team to compose a team response to one of the discussion questions. On these alternating weeks, you must individually post a comment on a response posted by another team by Saturday of that week.

To earn credit for comments, you must comment on at least one other student's/team's response. Keep in mind that replies to comments made to your responses to discussion questions or your team's responses to discussion questions do not count as comments. Similar to responses, the score you earn for comments will be based on the quality of the content; that is, the thoroughness, clarity, conciseness, and relevance to the discussion question and the response you are commenting on, as well as the value they add to the discussion.

Remember, the purpose of the course discussions is to stimulate academic debate. Critical thinking is highly desirable! If you do not agree with someone's post, say so. Just do so with respect (see the Discussion Etiquette section below).

As previously stated, I will read every posted message, but I will not necessarily respond to every response or to every comment. I will, however, interject comments where necessary for clarification.
Discussion Etiquette

Discussion etiquette is essential in any online communications. Students are encouraged to voice their own opinions but in doing so be respectful of the opinions of others and to refrain from inappropriate commentary. Should such inappropriate comments occur, I will intervene as I monitor the dialogue in the discussions. I will request that inappropriate content be removed from the discussion and will recommend University disciplinary action if deemed appropriate. Students as well as faculty should be guided by common sense and basic etiquette. The following are good guidelines to follow:

- Never post, transmit, promote, or distribute content that is known to be illegal.
- Never post harassing, threatening, or embarrassing comments.
- If you disagree with someone, respond to the subject, not the person.
- Never post content that is harmful, abusive; racially, ethnically, or religiously offensive; vulgar; sexually explicit; or otherwise potentially offensive.

In addition to the above, a positive attitude is essential to a healthy learning environment. Not only should your posts be respectful and insightful, but they should also be positive in order to benefit the entire class. In addition, all posts should be grammatically correct and should be spell-checked prior to posting to avoid confusion.

Programming Assignments

The details concerning programming assignments will be available within CougarView.

Final Project

As today's Web sites become more and more complex, the need to develop these sites as teams becomes more and more apparent. As such, the final project will be a team effort where each team will consist of 3-6 members. The team will be responsible for deciding on the scope of the project. Details of the project requirements will be posted within CougarView.

Assignment Due Dates

All responses to class discussion questions, comments to other students' responses, and programming assignments are due during the week in which they are assigned and no later than 11:59 PM (23:59) (Eastern Time). The due dates for specific responses, comments, and
**Late Assignments**

If circumstances prevent the timely posting of assignments, please notify me by e-mail within CougarView. Unless you make prior arrangements with me, any assignment submitted after its assigned due date will be considered late. Late assignments may be submitted up to two days beyond their assigned due date and are subject to a 10% reduction in points for each day they are submitted beyond the assigned due date. Assignments not submitted by the assigned due date or within the two days following the assigned due date will be assessed a grade of zero (0).

Because of course grade reporting requirements, the final project must be submitted by the assigned due date -- no exceptions! Any final project not submitted by the assigned due date will be assessed a grade of zero (0).

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**Extra Credit**

There are no provisions for extra credit in this course.

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**Incompletes**

If unusual circumstances preclude you from completing the course and you have satisfactorily completed all the other course requirements up until that point, I will award you a grade of "Incomplete" provided you contact me regarding the unusual circumstances and you agree to certain conditions for removal of the "Incomplete." You must, however, contact me and arrange for the Incomplete as soon as you are aware that you will be unable to complete the course and before the last day of class.

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**Software**

In this course, we will be using Visual Studio 2012 as our primary Web development tool. If you do not have Visual Studio 2012, you may obtain a copy of the software under the DreamSpark agreement as described below.

We will also be using SQL Server Express 2012 for the individual Web development assignments and SQL Server 2012 for the team assignment. SQL Server Express 2012 is typically installed when Visual Studio 2012 is installed. You do not need to install SQL Server 2012 as this will be installed on a CSU server. Additional database installation and use instructions will be provided in CougarView.
Obtaining MSDNAA Software

As a student in this course, you are eligible for free Microsoft software development software. Visit the department’s DreamSpark site (use the Resources link). You may have to register your account using your CSU email.

**Downloading the software.** To download the software, visit the DreamSpark Premium site, click on "Your Account" in the upper, right-hand menu. If you've downloaded software from this or the previous MSDNAA site before, you can attempt to log in using the account you were previously given. If this does not work, click on the "Forgot your password?" link under the "Sign In" button. In the resulting page, enter your CSU email address and click on the "Submit" button. If the system still does not recognize you, return to the sign in page and click on the "Register" button. In the resulting page, enter your CSU email address including '@columbusstate.edu.' If the site still does not recognize you, please send a message to cs@columbusstate.edu. Be sure to include your CSU email address in the message.

Technical Support

You must have the ability to administer your own computer system(s), and to install and configure your own software. Ordinarily, I can only provide limited support.

Academic Honesty/Plagiarism Policy

Academic dishonesty includes, but is not limited to, activities such as cheating and plagiarism ([http://ace.columbusstate.edu/advising/a.php#AcademicDishonestyAcademicMisconduct](http://ace.columbusstate.edu/advising/a.php#AcademicDishonestyAcademicMisconduct)). It is a basis for disciplinary action. Any work turned in for individual credit must be entirely the work of the student submitting the work. All work must be your own. For group projects, the work must be done only by members of the group. You may share ideas but submitting identical assignments (for example) will be considered cheating. You may discuss the material in the course and help one another with debugging; however, any work you hand in for a grade must be your own. A simple way to avoid inadvertent plagiarism is to talk about the assignments, but don't read each other's work or write solutions together unless otherwise directed by me. For your own protection, keep scratch paper and old versions of assignments to establish ownership until after the assignment has been graded and returned to you. If you have any questions about
this, please contact me immediately. For assignments, access to notes, the course textbooks, books and other publications is allowed. All work that is not your own, MUST be properly cited. This includes any material found on the Internet. Stealing or giving or receiving any code, diagrams, drawings, text or designs from another person (CSU or non-CSU, including the Internet) is not allowed. Having access to another person’s work on the computer system or giving access to your work to another person is not allowed. It is your responsibility to prevent others from having unauthorized access to your work.

No cheating in any form will be tolerated. Penalties for academic dishonesty may include a zero grade on the assignment or exam/quiz, a failing grade for the course, suspension from the Computer Science program, and dismissal from the program. All instances of cheating will be documented in writing with a copy placed in the School’s files. Students will be expected to discuss the academic misconduct with the faculty member and the chairperson. For more details see the Student Handbook: http://students.columbusstate.edu/policies.php.

In programming courses such as this, you must be particularly diligent in submitting only your own work. In completing the assignments for this course, if you use another source or sources, you must clearly document what source(s) you used and the extent of that use. This includes messages posted in the discussions as well. Unquoted/paraphrased material as well as directly quoted material must be referenced. Quoted textual material must appear in quotes.

Submitted work that is comprised significantly of external sources, even if those sources are properly documented, may receive a reduction in score. In addition, not following proper external source documenting requirements will be considered plagiarism and will result in the sanctions described above.

Confidentially of Information
Shared by Students

CSU does not guarantee the confidentiality of information shared by students in the course environment. Therefore, you should not share any confidential information from employers unless explicitly released for public use.

ADA Accommodation Notice

If you have a documented disability, as described by the Rehabilitation Act of 1973 (P.L. 933-112 Section 504) and the Americans with Disabilities Act (ADA) and subsequent amendments and would like to request academic and/or physical accommodations, please contact the Office of Disability Services in the Schuster Student Success Center.
| Getting Help | (room 221), 706-507-8755, as soon as possible. Course requirements will not be waived, but reasonable accommodations may be provided as appropriate. |

At the top of the course content, I will provide a discussion area within CougarView entitled "Questions?" If you have a general question about the course or need technical help on any glitches in CougarView, etc., please post your question in that discussion area. For specific questions about your grades, graded discussions, graded assignments, graded exams or graded quizzes, private email is the best approach.