

CSC 496/CSC584 Emerging Web Technology (Winter 2018-2019)

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COURSE OBJECTIVES:

As web technologies evolve, Microsoft unveils new version of ASP.NET Core and .NET Core. With the newer version, developers use an innovative Razor Pages to develop a user interface with ASP.NET Core MVC for multiple platform web applications. The Visual Studio 2017 will be used as an Integrated Development Environment (IDE). In this course, we will use hands-on training to introduce the innovative platform of web programming including RESTful web services. We will use ASP.NET Core and C# with Visual Studio 2017 Enterprise and Razor Pages for our project development. Our objectives are threefold:

1. Introducing the concepts of Model-View-Controller (MVC) with ASP.NET Core.
2. Becoming familiar with the state-of-the-art web programming techniques.
3. Learning how to develop dynamic web pages with C# and Visual Studio 2017.

TEXTBOOK & REFERENCES:

1. C# Programming Guide (<https://docs.microsoft.com/en-us/dotnet/csharp/>)
2. ASP.NET Core MVC (<https://docs.microsoft.com/en-us/aspnet/core/getting-started>)
3. Philip Japikes and Kevin Grossnicklaus, "Building Web Applications with Visual Studio 2017: Using .NET Core and Modern JavaScript Frameworks," Apress, 2017.

PREREQUISITES: Students must be familiar with Data Structures and Java/PHP Programming with one of CSC241, CSC515, or CSC516.

COURSE OUTLINE:

Part I: Fundamentals and C#

1. Visual Studio 2017
2. C# Programming
3. .NET Core and Command Line Interface (CLI)

Part II: ASP.NET Core MVC Web Applications

4. Razor Pages for ASP.NET Core MVC Web Applications
5. ASP.NET Core Web Application

Part III: ASP.NET Core Web API and RESTful Services

6. ASP.NET Core Web API and the RESTful Service

Part IV: Data Accessing

7. Data Accessing

EVALUATION CRITERIA:

1. 15% - Project I
2. 15% - Project II
3. 15% - Project III
4. 15% - Project IV
5. 40% - Exam

The Exam is in-class, close-book, and close-notes. Letter grades will be assigned based on the total grades. Plus and minus will also be used when assigning letter grades.

EXAM/PRESENTATION POLICY:

1. There will be NO make-up exams. If anyone cannot take any midterm under extenuating situations (with the consent of the instructor prior the exam), your grade will be determined based on other evaluating criteria.
2. The grading criteria for the project include: control of timing, quality of the presentation slides, submission to the Assignments folder on D2L, and compliance to the requirements.

PROGRAM LEARNING OUTCOME

Our graduates will be able to apply theory, techniques, and methodologies to create high quality computing systems that function effectively and reliably in the emerging and future information infrastructure.

COURSE LEARNING OUTCOMES Students will be able to perform the following after completing this course:

1. Become aware of the principles of the architecture of web application structure and programming.
2. Understand the theory of the design issues related to web page.
3. Develop web projects using the client-server architecture.
4. Learn the server-side programming language C# with MySQL database accessing.
5. Become aware of the Model-View-Controller web project paradigm.

ATTENDANCE POLICY:

Attendance is used for reference only. If your attendance record is near perfect, it will be taken into account when your grade is near the borderline, e.g., 92.4, 89.4, etc. It is your responsibility to catch up with the lecture materials. When missing a lecture on the due date of a homework assignment, a student will be responsible for submitting the assignment.

ACADEMIC & PERSONAL INTEGRITY

It is the responsibility of each student to adhere to the university's standards for academic integrity. Violations of academic integrity include any act that violates the rights of another student in academic work, that involves misrepresentation of your own work, or that disrupts the instruction of the course. Other violations include (but are not limited to): cheating on assignments or examinations; plagiarizing, which means copying any part of another's work and/or using ideas of another and presenting them as one's own without giving proper credit to the source; selling, purchasing, or exchanging of term papers; falsifying of information; and using your own work from one class to fulfill the assignment for another class without significant modification. Proof of academic misconduct can result in the automatic failure and removal from this course. For questions regarding Academic Integrity, the No-Grade Policy, Sexual Harassment, or the Student Code of Conduct, students are encouraged to refer to the Department Undergraduate Handbook or Department Graduate Handbook, the Undergraduate Catalog/Graduate Catalog, the Ram's Eye View, and the University website at www.wcupa.edu.

STUDENTS WITH DISABILITIES

If you have a disability that requires accommodations under the Americans with Disabilities Act (ADA), please present your letter of accommodations and meet with me as soon as possible so that I can support your success in an informed manner. Accommodations cannot be granted retroactively. If you would like to know more about West Chester University's Services for Students with Disabilities (OSSD), please visit them at 223 Lawrence Center. The OSSD hours of Operation are Monday – Friday, 8:30 a.m. – 4:30 p.m. Their phone number is 610-436-2564, their fax number is 610-436-2600, their email address is ossd@wcupa.edu, and their website is at <http://www.wcupa.edu/ussss/ossd>.

EXCUSED ABSENCES POLICY FOR UNIVERSITY-SANCTIONED EVENTS

Students are advised to carefully read and comply with the excused absences policy for university-sanctioned events contained in the WCU Undergraduate Catalog. In particular, please note that the “responsibility for meeting academic requirements rests with the student,” that this policy does not excuse students from completing required academic work, and that professors can require a “fair alternative” to attendance on those days that students must be absent from class in order to participate in a University-Sanctioned Event.

REPORTING INCIDENTS OF SEXUAL VIOLENCE

West Chester University and its faculty are committed to assuring a safe and productive educational environment for all students. In order to meet this commitment and to comply with Title IX of the Education Amendments of 1972 and guidance from the Office for Civil Rights, the University requires faculty members to report incidents of sexual violence shared by students to the University's Title IX Coordinator, Ms. Lynn Klingensmith. The only exceptions to the faculty member's reporting obligation are when a student communicates incidents of sexual violence during a classroom discussion, in a writing assignment for a class, or as part of a University-approved research project. Faculty members are obligated to report sexual violence or any other abuse of a student who was, or is, a child (a person under 18 years of age) when the abuse allegedly occurred to the person designated in the University protection of minors policy. Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at the webpage for the Office of Social Equity at http://www.wcupa.edu/_admin/social.equity/.

EMERGENCY PREPAREDNESS

All students are encouraged to sign up for the University's free WCU ALERT service, which delivers official WCU emergency text messages directly to your cell phone. For more information, visit <http://www.wcupa.edu/wcualert>. To report an emergency, call the Department of Public Safety at 610-436-3311.

ELECTRONIC MAIL POLICY

It is expected that faculty, staff, and students activate and maintain regular access to University provided e-mail accounts. Official university communications, including those from your instructor, will be sent through your university e-mail account. You are responsible for accessing that mail to be sure to obtain official University communications. Failure to access will not exempt individuals from the responsibilities associated with this course.

PUBLIC SAFETY (610)436-3311