Business and Technology Division Computer Technology Course Syllabus Active Server Pages CPT 239

<u>Credit/Contact Hours</u> <u>Prerequisite</u> <u>Co-requisite</u> <u>Course Description</u> <u>Purpose of Course</u> <u>Required Texts</u> <u>Additional Materials</u> <u>Course Outcomes</u> <u>Program Student Learning Outcomes</u> <u>Greenville Technical College Core Competencies</u> <u>Instructional Agreement</u> <u>Grading Scale</u> <u>Course Policies</u>

Credit/Contact Hours:

3.0

Prerequisite:

CPT 186 or CPT 187 or CPT 230 and IST 226 or IST 237. Computer Technology students must obtain a minimum grade of "C" in all CPT and IST courses.

Co-requisite: None

Course Description:

This course is a study of Active Server Pages (ASP) programming to build, implement, and execute ASP scripts and examines topics related to the syntax of server-side ASP scripting as well as the use of ASP with databases.

Purpose of Course:

To teach the student different approaches for creating server-side scripts using Active Server Pages. The student will learn to successfully build, implement, and execute scripts to create fully-functional Web applications. In addition, the student will learn how to develop scripts and pages in real-world environments that take full advantage of the newest technology.

Required Texts:

- 1. <u>ASP.NET Programming with Visual C# and SQL Server</u> by Don Gosselin; Cengage Learning; ISBN: 978-1-4239-0324-6
- Data Files which can be downloaded from the site <u>http://www.cengage.com/coursetechnology</u>. Type the text's ISBN number (without the dashes) in the search box, and when the text is found, click on "Students: Access Free Companion Content."

- 3. Microsoft Visual Studio.NET 2012/2015 Professional or Community Version will be used for this course to develop ASP.NET forms. It is mandatory that the student have access to Visual Studio.NET 2012/2015 at home or by using the software available in the Student Lab in the Engineering Technology Building (#103), Room 113, on the Barton Campus.
- 4. NOTE: <u>Students in traditional classes</u> must access Blackboard for course-related information.

<u>Students in hybrid and online classes</u> will access their online content through Blackboard.

Additional Materials:

A USB portable storage device such as a flash drive will be needed for coursework storage.

Course Outcomes:

Students who successfully complete this course will have demonstrated the skills required to accomplish the following objectives with a minimum competence level of 70 percent.

- 1. Students will be able to demonstrate the ability to take initiative by completing a lab assignment with minimal supervision.
- 2. Students will be able to demonstrate the ability to work under pressure, and show responsibility by completing lab assignments.
- 3. Students will be able to demonstrate the ability to create a basic Web page using ASP.NET controls.
- 4. Students will be able to demonstrate the ability to create dynamic Web applications using both Standard and Server controls.
- 5. Students will be able to demonstrate the ability to debug ASP.NET project solutions by identifying and correcting syntax errors, run-time errors, and logic errors.
- 6. Students will be able to demonstrate the ability to create Web pages that manipulate Strings and String Expressions using C#.
- 7. Students will be able to demonstrate the ability to maintain state using cookies, hidden fields, and session variables to pass information.
- 8. Students will be able to demonstrate the ability to access, display, and update information stored in a database using ADO.NET components.

Program Student Learning Outcomes:

Upon successful completion of the Computer Technology Degree students will be able to:

- 1. Install computer and network hardware.
- 2. Install computer operating systems and application software.
- 3. Design, create and test computer programming solutions.
- Demonstrate the ability to take initiative, assume responsibility, and work under pressure with minimum supervision by successfully completing "hands-on" computer assignments.
- 5. Analyze, troubleshoot, and correct computer related technical problems.

Revised August 2012

Greenville Technical College Core Competencies:

Communication Core Competency: Students will demonstrate effective written and oral communication skills to convey information, ideas, or opinions.

- Written Communication: Students will demonstrate effective written communication skills to convey information, ideas, or opinions.
- Oral Communication: Students will demonstrate effective oral communication skills to convey information, ideas, or opinions.

Critical Thinking Core Competency: Students will demonstrate effective reasoning, problem solving, or quantitative skills to develop an opinion or conclusion.

- Critical Reasoning: Students will employ inquiry, analysis, and synthesis of information to formulate and/or evaluate an opinion or conclusion.
- Problem Reasoning: Students will design and formulate a strategy to answer a question or achieve a desired goal.
- Quantitative Reasoning: Students will be able to analyze numerical information or observable facts resulting in informed conclusions.

Information Literacy Core Competency: Students will be able to locate, evaluate, and use information effectively from diverse sources.

Professionalism Core Competency: Students will demonstrate conduct and etiquette appropriate to the community and chosen career.

- Professionalism: Students will display professional conduct and work habits.
- Teamwork: Students will collaborate with others to accomplish a shared goal.

Instructional Agreement:

This syllabus is an agreement between the student and instructor concerning course objectives, course content, grading and other policies and procedures particular to the course as well as any posted program, departmental, and divisional policies. It is also the student's responsibility to become familiar with the

Student Handbook/College Catalog found in the Student Resource area of Blackboard.

Grading Scale: Grades will be calculated as follows:

Exams represent 80 percent of the final grade: 55 percent tests and 25 percent final exam.

Lab/written assignments count 20 percent of the final grade.

- 1. Programming assignments will be assigned from selected chapters.
- A one two page paper on the adoption of ASP.NET 2008/2010/2012/2015 around the world is required. The paper will include information regarding the countries in which ASP.NET is available and the languages Microsoft has translated ASP.NET into. A rubric for assessment of the assignment will be provided.
- *3.* The following factors will also be considered in grading programs:
 - a. The program must work correctly and produce the desired results.
 - b. The program must be written in the style described in the text or described in class.
 - c. Write with compactness in mind.
 - d. Documentation should be clear and meaningful.

All assignments (i.e., labs, projects, research papers, etc.) for this course must be completed and submitted to the instructor by the due date established in order to receive credit for the assignment.

NOTE: ALL TESTS AND EXAMS ARE RETAINED BY THE INSTRUCTOR.

| Final letter grades will be issued as follows: | A = | 90 - 100 |
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| | В = | 80 - 89 |
| | C = | 70 - 79 |
| | D = | 60 - 69 |
| | F = | 0 - 59 |

Course Policies: PLAN OF INSTRUCTION:

TEXT

CHAPTER MAJOR TOPICS

- Chapter 1 Introduction to Web Development Chapter 1 Assignment Due
- Chapter 2 Getting Started with ASP.NET and C# Chapter 2 Assignment Due
- Chapter 3 Using Functions, Methods, and Control Structures Chapter 3 Assignment Due
- **Test 1** Chapters 1, 2, & 3
- Chapter 4 Introduction to Web Forms and Controls Chapter 4 Assignment Due
- Chapter 5 Manipulating Strings with C# Chapter 5 Assignment Due
- Test 2
 Chapters 4 & 5
- Chapter 6 Debugging and Error Handling Chapter 6 Assignment Due
- Chapter 7 Working with Databases and SQL Server Express Chapter 7 Assignment Due

Chapter 8 Manipulating SQL Server Databases with ASP.NET Chapter 8 Assignment Due

 Test 3
 Chapters 6, 7 & 8

Chapter 9 Managing State Information Chapter 9 Assignment Due

ASSIGN – Paper on the Adoption of ASP.NET Around the World

Chapter 10 Developing Object-Oriented C# Programs Chapter 10 Assignment Due

Paper on the Adoption of ASP.NET Around the World Due

*******Comprehensive Final Examination *******

SPECIAL NOTE TO ONLINE STUDENTS: The final exam for online students will be administered on the Barton Campus and will be scheduled at a time determined by the department.

The instructor reserves the right to modify the Plan of Instruction by changing the sequence of text material or testing content.