Lakeside View Global Vision
CEGEP JOHN ABBOTT COLLEGE

(420-PS4-AB) Developing ASP .NET Web Applications with ADO .NET
Course Framework

Certificate Program in Internet Programming & Development (A.E.C. LEA.BN)
Full-Time Day Training Program

Parameters

Course Number	**420-PS4-AB**
Course Title (Long)	**Developing ASP .NET Web Applications with ADO .NET**
Course Title (Short)	ASP .NET
Course Weighting	Daily: 2.5 hours lecture + 2.5 hours laboratory + 3 hours homework
Timetable & classroom	June 7, 2017 – June 28, 2017 Monday to Friday 9:00 – 12:30 and 13:00 to 15:00 in BH-213
Number of Credits (Units)	2.66
Number of Hours of Instruction	75
Competencies Fully Met	DC66 – Create an ASP .NET Web application that delivers dynamic content to a Web site
Prerequisite course	(420-PM3-AB) .NET Programming Fundamentals
Semester	**Summer 2017**
Teacher *Name* *Office* *Phone* *Internet* *Office Hours*	 Claudiu Scotnotis Penfield 227 514-457-6610, local 5778 Prefer by MIO; claudiu.scotnotis@johnabbott.qc.ca Appointments can be made outside of the course hours when the need arises.

Course Description

This course will teach the fundamentals of Web application site implementation by using Microsoft ASP.NET and Microsoft C# .NET. Using the Microsoft Visual Studio® .NET environment and the Microsoft .NET platform, the goal is to create an ASP.NET Web application that delivers dynamic content to a Web site. This course introduces students ASP.NET Web forms and to the ASP.NET Model-View-Controller (MVC) web development framework. MVC is a powerful, patterns-based way to build dynamic websites that enables a clean separation of concerns and that gives you full control over markup for enjoyable, agile development. ASP.NET MVC includes many features that enable fast, Test Driven Development-friendly development for creating sophisticated applications that use the latest web standards. This course will cover many web development related concepts such as databases, servers, configuration files, LINQ, ADO.NET Entity Framework, page validation and hosting. These concepts will be understood and applied to develop several ASP.NET MVC Web applications.

Course Placement within the Program

This course is given in the final semester of the program.

Course Objectives

Upon successful completion of this course, the student will be able to understand:

- ASP .NET components and MVC
- Succeed in creating an ASP .NET website on their own
- Contribute professionally to an ASP .NET web development project

Course Learning Activities

1. Lectures/Demonstrations: Important material from the text and outside sources will be covered in class. You should plan to take careful notes as not all material can be found in the texts or readings. Discussion is encouraged as is student-procured, outside material relevant to topics being covered.
2. Assignments: Concepts Reviews, Skills Reviews, Independent Challenges and other projects and readings will be periodically assigned to help support and supplement material found in the lessons. These assignments may require the application of various software applications.
3. Tests: Occasional scheduled or unscheduled tests will be given to help ensure you stay up with assigned material.
4. Exams: The exams will be closed book/note and will test assigned readings and material discussed in class.
5. Team Term Project: The term project focuses on methodologies and tools for this course related technologies using frameworks. This project is structured to be as realistic as possible given the time available in the term.
6. Classroom Activity: Participation and Discussion

Instructional Methodology

The course is a combination of theory, classroom labs and case work. The students will be assigned cases and asked to analyze and discuss them.

Students will

- Work alone
- Work in groups

This course requires your individual presence and your active, consistent and sustained participation in your individual work. Your individual responsibilities are to complete the work assigned and ready to work at the start of each class.

Evaluation Policy

This course will be marked of 100 points based on Assignments, Tests, Term Project, and Final Exam. To obtain the passing grade in this subject, a student must achieve a grade of 60% or better on the overall course

Evaluation	*Points*
Assignments:	20 (up to 5 milestones worth 4% each)
Tests:	20 (or 2 tests worth 10% each)
Term Project:	20 (5% of the grade on Final Project will go towards the evaluation of aspects of English proficiency)
Final Exam:	40

Textbook and References:

Texts and Other Materials: Course syllabus; text and workbook, reference handouts; assignment handouts; printed course manual; access to the Internet and World Wide Web.

Attendance Policy

Attendance is mandatory to student's success in this course. Attendance will be taken at each session (see IPESA Section 5.2 – Page 19). Unexcused absences should not account for more than 20% of the total course time. If a student misses 20% or more of the total course hours due to unexcused absences, the instructor may prohibit further attendance and assign the grade earned to-date in the course as the final grade.

Academic Policy - Cheating and Plagiarism

Cheating and/or plagiarism are offences which will not be tolerated by the College. Such offences occur when a student violates the procedures governing the administration of examinations, tests or other means of evaluating student achievement in a subject or program. Instructors may assign a grade of zero for any assignment, test, or examination that involves cheating or plagiarism. John Abbott College's policy on Cheating and plagiarism will be strictly enforced (see IPESA Section 5.5).

Competencies CODE: DC66

OBJECTIVE	STANDARD

Statement of the Competency
Create an ASP .NET Web application that delivers dynamic content to a Web site.
	Achievement Context
	• In a classroom and computer laboratory environments – using:
	  ○ Using a workstation and the appropriate software
	  ○ Based on situations representative of the workplace and requiring the development of applications involving a limited number of classes
	  ○ Using all the documentation available on the applications to be developed
	• In written assignment(s) and/or in-class exam(s)
	• In simulation exercises
	• Working alone and in groups
	• Based on industry standards

Elements of the Competency	**Performance Criteria**
1. Describe the key features of the Microsoft .NET Framework and ASP.NET	1.1 Explain the advantages of using the .NET Framework. 1.2 Describe the key functionality and purpose of ASP.NET in developing Web applications. 1.3 List resources for Web application development with Visual Studio.
2. Explain how to create a Web application by using Visual Studio	2.1 Describe how to create a component by using Visual Basic or C# 2.2 Overview of the Microsoft .NET-Based Languages
3. Describe how to create a Microsoft ASP.NET Web Form that contains server controls and uses a master page	3.1 Learn how to create Web Forms 3.2 Explain how to add server controls to a Web Form by using the Microsoft Visual Studio toolbox
4. Describe how to create ASP.NET Model-View-Controllers (MVC) Web applications with common layout.	4.1 Understand the MVC framework 4.2 Learn how to create Controllers, Views and Models.
5. Explain how to add functionality to server controls that are on an ASP.NET Web form and MVC.	4.1 Explain how to implement code-behind pages in a Web application. 4.2 Understand how to create event procedures for Web server controls. 4.3 Learn how to handle Page events in a Web application.
6. Explain how to access data by using Microsoft ADO.NET and the built-in data access tools available in Visual Studio.	6.1 Describe the key features of ADO.NET. 6.2 Explain how to create a connection to a database by using ADO.NET. 6.3 Understand how to access data from a SQL Server database