A POLYTECHNIC INSTITUTION

School of Computing & Academic Studies
Program: Part-time Studies

Course Outline
COMP 2690

Windows App. Development in C# .NET

Start Date:	September 18 2007 (Tuesday)			**End Date:**	December 04, 2007		
Total Hours:	36	**Total Weeks:**	12	**Term/Level:**	3	**Course Credits:**	3
Hours/Week:	3	**Lecture:**	1.5 **Lab:** 1.5				

Prerequisites		**COMP**	**is a Prerequisite for:**
Course No.	**Course Name**	**Course No.**	**Course Name**
COMP 1451	Intro. to Software Development 2	COMP 2691	Advanced Windows App. Development
or COMP 1412	Intro to .NET Programming C# L2		
or COMP 2489	VB.NET Intermediate Programming		

■ Course Description:

This hands-on, intermediate level course and labs are designed for experienced OO programmers who want to learn Microsoft industry standards and best practices. Students who already know some C/C++/Java syntax are introduced to the C# language and the .NET Framework 2.0. The main focus of this course is Windows application development, building graphical user interfaces (GUIs) and designing Windows software applications with Visual Studio 2005. Topics include: Windows Forms and controls, event-driven programming and the MSDN Library for on-line help. Upon successful completion of this course, students will be prepared to learn more about C# and .NET in the follow-on course, COMP 2691. Prerequisites: COMP 1412, or COMP 1451, or COMP 2425 with an OO an understanding, or COMP 2489, or equivalent knowledge. (3 Credits)

■ Evaluation

Lab Participation	10%
Assignments	30%
Midterm Exam	25%
Final Exam	35%
TOTAL	100%

Comments: In order to pass the course

1) your overall course mark must be at least **60%**
   and
2) the average between the midterm and final exam mark must be at least **50%**

■ Course Learning Outcomes/Competencies

Upon successful completion, the student will be able to:

- Explain Microsoft.NET and understand its' major components: Common Language Runtime (CLR) and Base Class Library (BCL)
- Use the C# language to build Windows Form applications
- Design Windows GUI applications with forms, dialogs and a variety of controls
- Use Visual Studio 2005 and the MSDN Library for on-line help
- Write executable and class library Assemblies, using C#
- Work with multiple projects, using Visual Studio Solutions

■ Verification

I verify that the content of this course outline is current.

Charlie Blattler	September 2, 2007
Authoring Instructor	Date

I verify that this course outline has been reviewed.

Kevin Cudihee	
Program Head/Chief Instructor	Date

I verify that this course outline complies with BCIT policy.

Kim Dotto	
Dean/Associate Dean	Date

Note: Should changes be required to the content of this course outline, students will be given reasonable notice.

■ Instructor(s)

Charlie Blattler	Office Location:	Office Phone:
	Office Hrs.:	E-mail Address: comp2690@shaw.ca

■ Learning Resources

Required:

(none)

Recommended:

Programming Microsoft Visual C# 2005: The Language – Donis Marshall (*Microsoft Press*)

■ Assignment Details

There are six assignments.

■ Information for Students

By attending this course and receiving this course outline, you have been made aware of the following policies. Please follow the links provided as each student is responsible for reading and complying with these policies.

The following statements are in accordance with the *BCIT Student Regulations Policy 5002*. To review the full policy, please refer to http://www.bcit.ca/files/pdf/policies/5002.pdf.

Attendance/Illness:
In case of illness or other unavoidable cause of absence, the student must communicate as soon as possible with his/her instructor or Program Head or Chief Instructor, indicating the reason for the absence. Prolonged illness of three or more consecutive days must have a BCIT medical certificate sent to the department. Excessive absence may result in failure or immediate withdrawal from the course or program.

Academic Misconduct:
Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances are prohibited and will be handled in accordance with the *Violations of Standards of Conduct* section of Policy 5002.

The School of Computing and Academic Studies expects the highest level of professional conduct and ethical behaviour from all students enrolled in part time studies courses and programs. All students are reminded of the BCIT policy related to the *Responsible Use of Information Technology*. Read the full policy here: http://www.bcit.ca/files/pdf/policies/3501.pdf.

The Computing and IT knowledge and skills acquired by students in the course of their studies confers upon them, as with all professionals, a special responsibility to use their knowledge in a responsible, professional and ethical manner. Further, given that misuse of computer facilities at BCIT can have significant legal and/or economic impacts, upon evidence of any such misconduct, the School may recommend immediate suspension, even for first offences.

Attempts:
Students must successfully complete a course within a maximum of three attempts at the course. Students with two attempts in a single course will be allowed to repeat the course only upon special written permission from the Associate Dean. Students who have not successfully completed a course within three attempts will not be eligible to graduate from their respective program.

Accommodation:
Any student who may require accommodation from BCIT because of a physical or mental disability should refer to BCIT's Policy on Accommodation for Students with Disabilities (http://www.bcit.ca/files/pdf/policies/4501.pdf), and contact BCIT's Disability Resource Centre (SW1-2300, 604-451-6963, http://www.bcit.ca/drc/) at the earliest possible time. Requests for accommodation must be made to the Disability Resource Centre, and should not be made to a course instructor or Program area.

Any student who needs special assistance in the event of a medical emergency or building evacuation (either because of a disability or for any other reason) should also promptly inform their course instructor(s) and the Disability Resource Centre of their personal circumstances.

Schedule – COMP2690 – Windows Application Development in C# .NET

Week of/ Number	Outcome/Material Covered	Reference/ Reading	Assignment	Due Date
1	Introductions .NET SDK Visual Studio Intro Namespaces Using MSDN for Help *Lab*		Assign01	Week02
2	Writing classes XML Commenting Using Visual Studio Debugging Enumerations *Lab*		Assign02	Week03
3	Data types Operators Structures Method parameters (out, ref) Casting Convert class TryParse method checked/unchecked *Lab*		Assign03	Week05
4	Property methods Classes stuff: virtual, override, sealed, intializers StringBuilder class Text file access *Lab*			
5	Arrays Collection classes and their interfaces Generics Boxing/unboxing Windows forms Intro: Main, form properties, Button, MessageBox *Lab*		Assign04	Week07
6	**Midterm Exam** (no lecture, no lab)			
7	Controls: Button, Label, TextBox, Menus, RadioButton, CheckBox, GroupBox GUI Design *Lab*		Assign05 (big)	Week09

Week of/ Number	Outcome/Material Covered	Reference/ Reading	Assignment	Due Date
8	List controls ListBox, CheckedListBox, ComboBox Container controls Data binding (to controls) *Lab*			
9	Dialogs (modal and modeless) Common dialogs *Lab*		Assign06 (big)	Week12
10	Decoupling UI from business logic and data Class libraries Exceptions Lab – Take your assignment to class!			
11	.NET Under the Hood CLS, CTS, IL, CLR, ildasm, ngen Lab			
12	**Final Exam** (no lecture, no lab)			