HUMBER

Faculty: _____

Email: _____ @humber.ca

Faculty Availability: By email appointment

Program Coordinator:

COURSE OUTLINE ACADEMIC YEAR 2016/2017

Course Title:	Windows Application Development using .NET			
Course Code: ITS 5212	**Schedule Type Code:** LLB	**Credit Value:** 3	**Class Hours:** 4	
Pre-requisite(s): ITS 5102	**Co-requisite(s):**	**Pre-requisite for:** ITS 5312		
Program:	1096 Information Technology Solutions - Enterprise Development			
Restrictions:	Full Time Students Registered in the Program			

Program outcomes emphasized in this course:

- Install, configure, program and maintain IT applications (including operating systems, database management systems).
- Create customized software.
- Write programs that communicate with other computers over a network.
- Identify, analyze and apply object oriented (O-O) model and concepts including objects, classes, encapsulation, inheritance, abstraction, polymorphism, behavior, and interfaces.

Approved By:

Heather Lowry, Associate Dean
6 May 2017

Course Description:

This course introduce students to the internals of .NET programming with C# using Microsoft Visual Studio. .NET framework is used in the development of all windows applications and enhancement of the existing applications. Students will learn how to work with various GUI controls, collections, exception handling, LINQ, threading and connecting to the database.

Course Rationale:

This course will introduce students to different tools and techniques which are used to develop windows applications.

Learning Outcomes:

- Develop a windows forms application using various GUI controls.
- Develop applications that use system types and collections.
- Implement service processes, threading, and application domains in a .NET Framework application.
- Demonstrate the use of LINQ to query various data sources.
- Demonstrate a knowledge of exception handling mechanism.
- Understand the ADO.NET and will be able to use them to maintain the SQL Server database.

Essential Employability Skills:

Essential Employability skills are transferable skills that provide the foundation for a student's academic, vocational, and personal success.

☒ Communications	☒ Critical Thinking & Problem Solving	☒ Interpersonal
☐ Numeracy	☒ Information management	☒ Personal

Learning Resources:

Required Resources: As provided by faculty

- Murach's C# 2012, Joel Murach, Murach, ISBN # 978-1-890774-72-1

Supplemental Resources: Faculty will identify additional references during course of study. If student are to be tested on this material it will be noted in class.

Copyright:

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Learning Delivery Format:

Presentations and Demonstrations	10 %	Lectures	50 %
Hands-on practical lab	40 %	Independent Study	0 %

Course Content:

UNIT	TOPIC	ASSESSMENTS	RESOURCES
Introduction	Assignments, grading, class policy, review course objective, topics, assignments, policies	Details related to assignments, exercises, tests/exams to be provided in-class	Program Handbook Course Outline
Midterm			As provided by Faculty
Final			As provided by Faculty

UNIT	TOPIC(S)	ASSESSMENTS	RESOURCES
Coding	Similarities between Java and C# Introduction to Visual Studio 2012	Lab	
GUI programming fundamentals	Creating, saving and opening a windows project First windows program Discussion of the elements of the windows programs	Lab	
GUI Applications	Labels, texboxes, buttons Introduction to panels and group boxes Check boxes and radio buttons Picture boxes Tool tips Numeric up/down Link Label	Lab	Chapter 2 & 10

UNIT	TOPIC(S)	ASSESSMENTS	RESOURCES
Event Handling	Mouse event handling Keyboard event handling	Lab Assignment 1	
Advanced Windows Controls and Events	Create menus Calendars and date pickers Lists and combo boxes MDI applications User defined controls Visual inheritance	Lab	Chapter 24
Collections	Collections overview Arrays and enumerators ArrayList Stack Queue	Lab	Chapter 8
Multithreading	Introduction to Multithreading Basic threading principles Create/stop/suspend thread Passing parameters to threads	Lab	
LINQ	Querying an array using LINQ Querying a generic collection using LINQ	Assignment 2	Chapter 23
File Access with LINQ and Serialization	Searching Directories using LINQ Accessing files using LINQ	Lab	Chapter 21

UNIT	TOPIC(S)	ASSESSMENTS	RESOURCES
	Serialization		
Database Access	Connecting to database and maintaining it	Lab	Chapter 17, 18 and 19

Please note this course schedule may change as resources and circumstances require.

Student Evaluations
The passing mark in this course is 50%

50% In-class lab assignments
20% Practical Lab work
10% Project work
20% Exams / Tests
100% Total

Policies and Procedures:

It is the student's responsibility to be aware of the College Academic Regulation which can be found on the following website: http://www.humber.ca/academic-reguations.

Academic Integrity:

Academic integrity is essentially honesty in all academic endeavors. Academic integrity requires that students avoid all forms of academic misconduct or dishonesty, including plagiarism, cheating on tests or exams or any misrepresentation of academic accomplishment.

Research Activity:

This course does not include any research activities that involve human participants. Students will gather data ONLY from publicly available sources.

Academic Concern/Appeals:

If a student has questions or concerns regarding a grade on an assignment or test, the student should discuss the matter with the faculty member. The Program coordinator and/or the Associate Dean may be asked to assist if the faculty member and student are unable to resolve issues. For additional information please refer to Section 13 of College's Academic Complaint and Appeal Policy at the web site identified above.

Prior Learning Assessment Recognition (PLAR):

Course credits may be granted in recognition of prior learning, and that Application for Consideration is made through the Office of the Registrar at http://www.humber.ca/plar/docs/pla.pdf. Each course outline must indicate method(s) of assessment.

☐ Challenge Exam ☐ Portfolio ☐ Skills Test

☒ Interview ☐ Not Available ☐ Other (specify)

Accessible Learning Services:

Humber strives to create a welcoming environment for all students where equity, diversity and inclusion are paramount. Accessible Learning Services facilitates equal access for students with disabilities by coordinating academic accommodations and services. Staff in Accessible Learning Services are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. If you require academic accommodations, contact:

Accessible Learning Services: http://www.humber.ca/student-life/swac/accessible-learning
North Campus: (416) 675-6622 X5090
Lakeshore Campus: (416) 675-6622 X3331

Disclaimer:

While every effort is made by the professor/faculty to cover all material listed in the outline, the order, content, and/or evaluation may change in the event of special circumstances (e.g. time constraints due to inclement weather, sickness, college closure, technology/equipment problems or changes, etc.). In any such case, students will be given appropriate notification in writing, with approval from the Dean (or designate) of the School.

Appendix

Essential Employability Skills (MTCU Requirements)	Graduates of the program reliably demonstrate the ability to:
Communication	
Reading	1. Communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience 2. Respond to written, spoken, or visual messages in a manner that ensures effective communication
Writing	
Speaking	
Listening	
Presenting	
Numeracy	
Understanding and Applying Mathematical Concepts and Reasoning	3. Execute mathematical operations accurately
Analyzing and using Numerical Data	
Conceptualizing	
Critical Thinking & Problem Solving	
Analyzing	4. Apply a systematic approach to solve problems 5. Use a variety of thinking skills to anticipate and solve problems
Synthesizing	
Evaluating	
Decision-Making	
Creative and Innovative Thinking	
Information Management	
Gathering and managing information	6. Locate, select, organize and document information using appropriate technology and information systems 7. Analyze, evaluate and apply relevant information for a variety of sources
Selecting and using appropriate tools and technology for a task or project	
Computer literacy	
Internet skills	
Interpersonal	
Teamwork	8. Show respect for the diverse opinions, values, belief systems and contributions of others 9. Interact with others in groups or teams in ways that contribute to the effect working relationships and the achievement of goals
Relationship management	
Conflict resolution	
Leadership	
Networking	
Personal	
Managing self	10. Manage the use of time and other resources to complete projects 11.Take responsibility for one's actions, decisions, and consequences
Managing change and being flexible and adaptable	
Engaging in reflective practice	
Demonstrating personal responsibility	