Minnesota State University Moorhead

CSIS 336: C#.Net Programming

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites:
This course requires the following prerequisite
CSIS 155 - Introduction to Computers & Programming I

Corequisites: None

MnTC Goals: None

A comprehensive introduction to programming using Visual C#.Net for students with experience in at least one high-level programming language. The course provides students with all the necessary skills to build Windows applications, Web applications, and XML Web services.

B. COURSE EFFECTIVE DATES: 01/24/2006 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Introduction to .NET Framework and (CLR) Common Language Runtime.
2. C# applications, classes and objects.
3. Structured programming - overview.
4. Object-oriented programming - overview.
5. Introduction to LINQ.
6. Object-oriented programming - inheritance, polymorphism, interfaces.
7. Exception handling.
8. GUI with Windows forms.
9. GUI with WPF and XAML.
10. Files and streams.
11. XML and LINQ to XML.
12. Databases, LINQ to SQL and LINQ to DataSets .

D. LEARNING OUTCOMES (General)

1. Demonstrate the practical and theoretical knowledge of object-oriented programming in C# .NET.
2. Demonstrate the practical skills working with XML and LINQ (Language Integrated Query) to XML.
3. Demonstrate the practical skills of the GUI (Graphical User Interface) development with WPF (Windows Presentation Foundation) and XAML.
4. Demonstrate practical skills related to development of database applications, LINQ to SQL and LINQ to DataSets.
5. Demonstrate the practical skills related to development of Web applications using ASP .NET and ASP .NET Ajax.
6. Demonstrate practical skills related to development and consumption of .NET Web services using WCF (Windows Communication Foundation).

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted