Liverpool John Moores University

Title:	OBJECT ORIENTATED PRINCIPLES & THE .NET FRAMEWORK
Status:	Definitive
Code:	**5024COMP** (102968)
Version Start Date:	01-08-2011

Owning School/Faculty: Computing and Mathematical Sciences
Teaching School/Faculty: Computing and Mathematical Sciences

Team	emplid	Leader
Dhiya Al-Jumeily		Y

Academic Level:	FHEQ5	**Credit Value:**	24.00	**Total Delivered Hours:**	72.00
Total Learning Hours:	240	**Private Study:**	168		

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24.000
Online	24.000
Practical	12.000
Tutorial	12.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Coursework	50.0	
Report	AS2	Coursework	50.0	

Aims

To enable students to gain familiarity with the .NET development environment. Students will learn the principles of OO, how to design object-oriented applications with Visual Studio, create ASP.NET Web applications and connect to the database using ADO.NET.

Learning Outcomes

After completing the module the student should be able to:

1   Describe the key features of the .NET Framework.
2   Explain the fundamentals of object-orientated programming.
3   Design simple object-oriented applications.
4   Write program code for .NET environments using visual objects and new language features found in Visual Basic .NET.
5   Create ASP.NET Web applications and process Web Forms.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Report   1   2   3   4

Report   4   5

Outline Syllabus

Overview and Introduction of the .NET framework and development platform
Introduction to associated technologies and languages, C#.NET, VB.NET, ADO.NET and ASP.NET.
Introduction to .NET components and the component based development model
Introduction to Object Oriented principles and concepts
    The basic concepts and terminology of object-oriented design
    Objects and Classes, Methods, Keywords
    Procedures, Functions and Methods
    Arrays and strings.
    Delegates and Events: Event Handlers and Publishers, Exception Handling.
Working with data types, structures and conversions.
Introduction to ADO.NET database access model
Introduction to Visual Basic.NET Programming
    VB.NET Fundamentals
    Understanding Classes in VB .NET
    Data Access
    File Access
    Forms Programming
ASP.NET Development with Visual Basic.NET
    Introduction to ASP.NET with Visual Basic .NET
    Working with Web Forms Controls and Visual Basic .NET
    Validating User Input with Visual Basic .NET
    Debugging & error handling
    Data manipulation with ADO.NET
    Data presentation and collection with Visual Basic .NET
    ASP.NET Web Services

Learning Activities

Learning activities will be through lectures and tutorials where students will be encouraged to ask questions and discuss case studies and supported labs where students will be encouraged to put theory gained in lectures and tutorials into practice.

References

Course Material	Book
Author	Hart, C.
Publishing Year	2006
Title	Beginning ASP.NET 2.0 with C#
Subtitle	
Edition	
Publisher	Wiley
ISBN	978-0470042588

Course Material	Book
Author	Yao, P.
Publishing Year	2004
Title	.Net Compact Framework Programming with C#
Subtitle	
Edition	
Publisher	Addison Wesley
ISBN	978-0321174031

Course Material	Book
Author	Deitel, H and Deitel, P.
Publishing Year	2006
Title	C# for Programmers
Subtitle	
Edition	2nd Edition
Publisher	Prentice Hall PTR
ISBN	0131345915

Course Material	Book
Author	Hunt, J.
Publishing Year	2002
Title	C# and Object Orientation
Subtitle	
Edition	
Publisher	Springer
ISBN	1852335815

Course Material	Book
Author	Kalani, A. and Kalani, P.
Publishing Year	2003
Title	Developing and Implementing Web Applications with Visual C# .NET and Visual Studio .NET
Subtitle	
Edition	
Publisher	Que Publishing
ISBN	0789729016

Notes

This module is designed as an introduction to the technologies that comprise the Microsoft .NET strategy.