GMIT
INSTITIÚID TEICNEOLAÍOCHTA NA GAILLIMHE-MAIGH EO
GALWAY-MAYO INSTITUTE OF TECHNOLOGY

COMP08026
Object Oriented Software Development

Full Title	Object Oriented Software Development

Status	Uploaded to Banner	**Start Term**	2012
NFQ Level	08	**ECTS Credits**	10
Module Code	COMP08026	**Duration**	13 weeks - (13 Weeks)
Grading Mode		**Department**	Comp Science & Applied Physics
Module Author	Dr. John Healy		

Module Description

Introduction to programming (using an Object Oriented approach -specifically Java), assuming little or no previous experience in programming.

	Learning Outcomes ***On completion of this module the learner will/should be able to:***
1.	Demonstrate an understanding of the core concepts of object-oriented programming
2.	Implement a software application using the Java programming language utilising core object-oriented programming concepts, and develop problem solving skills as part of this process
3.	Design an object-oriented software application in Java
4.	Test and debug an object-oriented software application
5.	Understand the universality of the Object-Oriented paradigm and its applicability to programming languages such as C++, Java, C# / .NET.

Indicative Syllabus

Programming Fundamentals (40%): Software development using types, variables and operators; operator precedence, literals, control structures for decision and iteration, I/O. arrays, Exception handling.

OO programming (50%): OO programming using objects and classes; methods and parameter passing, pass by value and pass by reference, constructors. JVM structure: heap and stack.

Code design (10%): Code design, code style and quality, testing and debugging

Teaching and Learning Strategy

Assessment Strategy

Repeat Assessment Strategies

Indicative Coursework and Continuous Assessment:		**100 %**		
Form	***Title***	***Percent***	***Week (Indicative)***	***Learning Outcomes***

UNKNOWN	Assignment Design, develop and test an object-oriented application	50 %	End of Term	2,3
UNKNOWN	Practical Evaluation Assessment of knowledge of programming fundamentals	50 %	OnGoing	1,4,5

Full Time Delivery Mode Average Weekly Workload:			**6.00 Hours**		
Type	***Description***	***Location***	***Hours***	***Frequency***	***Weekly Avg***
Practical	Programming Practical	Computer Laboratory	6	Weekly	6.00

Literary Resources

- *Objects, Abstractions, Data Structures & Design Using Java*, Koffman, Wiley, 2005. ISBN: 0-471-46756-1
- *Head First Java, 2nd Edition*, K. Sierra, B. Bates, O'Reilly Media, 2005, ISBN: 059-6009208

Other Resources

None

Additional Information

None

Programme Membership

GA_KSOFG_L08 201700 Higher Diploma in Science in Software Development