Module Code | CS7014
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Module Name | Introduction to Programming
Module Short Title | N/a
ECTS weighting | 5
Semester/term taught | Semester 1
Contact Hours | Lecture hours: 18  
Lab hours: 18  
Total hours: 36
Module Personnel | Paula Roberts

Learning Outcomes
When students have successfully completed this module they should be able to:
- articulate the software development process  
- define object oriented programming concepts  
- model simple object oriented applications  
- independently implement simple Java applications using correct syntax, basic programming constructs and basic OO techniques  
- use their programming experience to gain an insight into the challenges inherent in software development

Module Learning Aims
The role of this module within the course is to develop, amongst the students from a health sciences background, an understanding of the process and challenges of software development. The objective is to teach introductory programming concepts and skills.

Module Content
Syllabus
Specific topics addressed in this module include:
- Introduction to Programming  
- Programming Constructs  
- Algorithms  
- Introduction to Object Oriented Programming  
- Unified Modelling Language  
- Java Language Basics  
- Use of the Eclipse Java API

Recommended Reading List
Java for Everyone, Cay. S. Horstmann, Wiley  
How to Think Like a Programmer: Problem Solving for the Bewildered, Paul Vickers, Cengage  
The Mythical Man-Month: Essays on Software Engineering, Frederick P. Brooks, Addison-Wesley

Module Pre Requisite

Module Co Requisite

Assessment Details
Assessment is based on two programming projects (50%), and an in lab test (50%).

Module approval date | N/a
Approved By | N/a
Academic | N/a
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