1. **Title of the module**

COMP4050 (CO405) Introduction to Object Oriented Programming

1. **School or partner institution which will be responsible for management of the module**

School of Computing/Mid Kent College

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 4

1. **The number of credits and the ECTS value which the module represents**

15 credits (7.5 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Autumn and Spring

1. **Prerequisite and co-requisite modules**

None

1. **The programmes of study to which the module contributes**

Foundation Degree in IT, HND in IT; HNC in IT

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**
2. Use appropriate software, programming languages and practices to create programs and structure data.
3. Carry out problem identification and analysis, design, development, testing and evaluation.
4. Demonstrate a knowledge and understanding of modelling in the design of computer-based systems in a way that shows a comprehension of the trade-off involved in design choices.
5. Identify and analyse requirements in specific problems and plan strategies for their solution.
6. Deploy appropriate theory, practices and tools for the specification, design and evaluation of computer-based systems.
7. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**
8. Demonstrate a knowledge and critical understanding of the establish principles of an IT professional and of the way in which these principles have developed.
9. Use IT concepts and principles outside the context in which they were first studied, including, where appropriate, the application of these principles in an employment context.
10. Use the main methods of enquiry and show an ability to evaluate critically the appropriateness of different approaches to solving problems in the IT field.
11. Analyse the extent to which a computer-based system meets the criteria defined for its current use and future development.
12. **A synopsis of the curriculum**

This is an introduction to programming and uses an ‘object first’ approach. The main focus is general object oriented and programming concepts from a software engineering perspective using the programming language Java. The module examines the main stages of software development from analysis, through design, implementation and test.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Objects first with Java 5th edition; 2011; Barnes D J and Kölling M; Pearson Education

Beginning Java Programming: The Object Oriented Approach; 2015; Baesens B and Backiel A; Wiley

First Encounter with Java (Including BlueJ); 2006; Bhuta S P; Shroff Publishers

Java Programming for Beginners; 2015; Warren T; CreateSpace Independent Publishing Platform

1. **Learning and teaching methods**

Total contact hours: 70

Private study hours: 80

Total study hours: 150

1. **Assessment methods**
   1. Main assessment methods

Programming assignment 1 – 35%

Programming assignment 2 – 35%

Examination (2 hrs) – 30%

13.2 Reassessment methods

Like for like

1. ***Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *8.5* | *9.1* | *9.2* | *9.3* | *9.4* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |
| **Private Study** | √ | √ | √ | √ | √ |  | √ |  | √ |
| *Lecture* |  | √ |  | √ | √ | √ | √ | √ |  |
| *Laboratory* | √ |  | √ |  | √ | √ |  | √ | √ |
| *Tutorial* | √ | √ | √ | √ |  | √ | √ | √ | √ |
| **Assessment method** |  |  |  |  |  |  |  |  |  |
| *Written Assignments* | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| *Examination* | √ | √ | √ | √ | √ |  |  | √ |  |

1. **Inclusive module design**

The Partner Institution recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Mid Kent College (Maidstone)

1. **Internationalisation**

The topics addressed by this module relate to a field of international importance, given the global role of computer programming in today's technological innovation. The programming languages covered by this module are international, being identical worldwide and independent of traditional spoken language.

1. **Partner College/Validated Institution**

Mid Kent College

1. **University School responsible for the programme**

School of Computing

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**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 24/05/17 | Major | September 2017 | 8-13 | No |
|  |  |  |  |  |

Revised FSO Feb 2018