Liverpool John Moores University

Title: SOFTWARE ENGINEERING WORKSHOP

Status: Definitive

Code: **4121COMP** (121219)

Version Start Date: 01-08-2021

Owning School/Faculty: Computer Science and Mathematics Teaching School/Faculty: Computer Science and Mathematics

Team	Leader
David Lamb	Υ

Academic Credit Total

Level: FHEQ4 Value: 20 Delivered 55

Hours:

Total Private

Learning 200 Study: 145

Hours:

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours	
Workshop	55	

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Artefacts	AS1	Group work to design a computational solution to a given problem and demonstrate an implementation	100	

Aims

The module aims to introduce the students to problem solving. Previously learnt programing skills will be brought to bear on problem scenarios, with the students designing and implementing computational solutions for problem solution. Additionally it is intended that the students work in small groups to solve the problem, introducing team working topics.

Learning Outcomes

After completing the module the student should be able to:

- 1 Understand planning for software solutions, in a larger project, as part of a software development team.
- 2 Explain software systems development through specification, design and implementation
- Analyse computer programs; determining the behaviour of the program from its source code and rewriting or adding to existing code.
- Appraise the facilities offered by modern CASE tools such as integrated development environments and source code repositories

Learning Outcomes of Assessments

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

Group work 1 2 3 4

Outline Syllabus

Problem based learning

Learning Activities

Activities will be based around a given problem topic. The sessions will be computing laboratory based, led by the students, with the support of academic staff in the workshop. Students will form software development teams to develop from specification through design to implementation and research, where necessary, a solution to the given problem.

Notes

This module is intended to introduce students to the skills required for developing software solutions as part of a development team. Each team will be fully supported by a staff member but the students will be expected to arrive at solutions and acquire for the themselves the necessary programming knowledge using the taught elements of introduction to programming as a foundation