

Liverpool John Moores University

Title: Computer Science Workshop
Status: Definitive
Code: **4216COMP** (127974)
Version Start Date: 01-08-2021

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

Team	Leader
Hoshang Kolivand	Y

Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 44
Total Learning Hours: 200 **Private Study:** 156

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	6
Tutorial	38

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Artefacts	AS1	Group work to design and implement a solution to a computer science problem.	100	

Aims

The module aims to strengthen programming skills of the students in a group-based environment to foster their computer science problem solving skills.

Learning Outcomes

After completing the module the student should be able to:

- 1 Understand how to work as a team towards a shared goal.
- 2 Share their ideas on a problem on a structured way for the benefit of the student's technical team.
- 3 Analyze and contribute to the behaviour of a program written by someone else.
- 4 Utilize the facilities of modern IDEs and SCMs to collaborate with others and to streamline development in a group-working context.

Learning Outcomes of Assessments

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

Group work	1	2	3	4
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Outline Syllabus

Software development methodologies

Team working principles for software development

Problem decomposition

Collaboration tools in popular IDEs

Diagramming tools supporting design

Understanding third party code via behavioral analysis

Learning Activities

On the first weeks the module intends to introduce the main concepts in small lecture fragments intertwined in otherwise tutorials slots. The tutorials will be based in computer labs and students will be expected to work as a group from the first week. Almost every week, students will receive a new, small scale, computer science problem that links their group working and problem-solving skills with past knowledge from the previous programming module. Through these small problems they will see how to approach larger and larger problems similar to the coursework. The team-working and problem-solving skills will be aided by the delivery team.

Notes

This module is intended to introduce students to the skills required for developing technical computer science solutions in software as part of a development team. Each team will be fully supported by the delivery team but the students will be expected to arrive at solutions themselves and acquire most of the necessary skills and knowledge themselves as well (e.g., they will also be expected to support their team members to strengthen cohesion and to arrive at solutions earlier).