

## MODULE DESCRIPTOR

<b>MODULE TITLE</b>	THE COMPUTING CHALLENGE		
<b>MODULE CODE</b>	CO1111 (L4)	<b>CREDIT VALUE</b>	20 UK CREDITS / 10 ECTS
<b>SCHOOL</b>	SCHOOL OF SCIENCES		

### MODULE AIMS

This module aims to:

1. To provide a stimulating learning environment, with emphasis on guided discovery and teamwork, establishing strong and supportive relationships between staff and students.
2. To provide an overview of key practical aspects of computing relevant to all courses and give students a clearer understanding of what their course (and others in computing) is about.
3. To begin the development of problem-solving skills relevant to computing professionals.
4. To begin the development of skills in usability and interface design and evaluation.
5. To develop confidence in the location, interpretation and presentation of academic information.

### MODULE CONTENT

#### Indicative syllabus content:

The course content/topics can be grouped into themes as follows:

This module offers an immersive experience designed to equip students with a foundation of study skills necessary to be successful in Computing at UCLan. By fostering a peer/tutor support network from the outset, and carefully managing the students working environment, the module will help each participant to make a successful transition from School/College to become a motivated, independent, University student.

By introducing the students to a broad range of computing concepts, the module will provide an introduction to topics which will be studied in more depth during the remainder of the first year. Upon completion of the module, the students will begin to be able to make informed choices about the course of study they wish to pursue.

In the first part of the module, through a series of intensively supported exercises and guided discovery, students will work in teams to create, evaluate, market on-line and present a sophisticated computing-related product.

The material is presented in four themes across the initial four-week period:

#### *Application design, implementation and deployment*

Visual application development environment, GUI development tool. Problem solving approach.

#### *Web marketing / Media promotion*

blogs, social interaction and on-line communities, viral marketing  
Computer applications in their business, and social context: factors for success and failure.  
Simple tools for creating marketing media and publishing on-line

#### *Internet technology, usability and testing (with continuing app development)*

Client/server model, web database connectivity, online security.  
User needs analysis, interface evaluation techniques, functional test planning and execution.

#### *Academic presentations*

Research: finding and evaluating information in various formats using the Internet and the library: using search engines effectively. Academic presentation style. Harvard referencing. Plagiarism (including Turnitin),

A further, self-contained exercise will be undertaken during a week at the end of the semester. Students will work together in smaller teams with others from their chosen course to design and carry out a simple research experiment in order to test a hypothesis. Results will be analysed and presented at the end of the week.

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## INTENDED LEARNING OUTCOMES

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On successful completion of this module a student will be able to:

1. With tutor assistance, plan and develop an interactive computing related product (e.g. a mobile phone app. with database connectivity via the internet) in a team environment.
  2. Design, discuss and evaluate a user interface for a computer application.
  3. Discuss the business context in which computer applications are developed, and use the internet to launch a campaign to market a product.
  4. Prepare and present material in an academic style, identifying relevant academic references and using them to support an argument.
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## TEACHING METHODS

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During the first four weeks, lectures will introduce the project and expand key themes.

Practical sessions present a variety of both individual and team-based tutorial material to explore concepts introduced in the lectures. Exercises will begin highly structured, and become progressively more open-ended with extra challenges to stretch students who are progressing more quickly.

Team presentations will take place regularly throughout the module. These will variously take the form of stand-up progress meetings, and more formal presentations in front of other students.

Students will be assessed both individually and as part of their team. Team assessment is continuous throughout the taught part the module, with presentations and product deliverables contributing to the portfolio. Students will subsequently contribute individually assessed exercises to the portfolio, for example a small-group dialogue (conversation) based around a prepared annotated bibliography.

During the second part of the module, lecture presentation and guided planning for the research project will be integrated into a workshop day at the beginning of the week. Students will present their findings in a conference style setting at the end of the week.

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## ASSESSMENT METHODS

This module is assessed through a portfolio.