

COMP310

Legacy Game Systems



20 credits
Compulsory for BSc Computing for Games
Dr Edward Powley

Introduction

On this module you build on your experience and knowledge of programming by engaging with the underlying computer technology in greater depth through an exploration of legacy game systems. You will learn the importance of disciplined programming practice while using low-level languages to create a simple game prototype. You'll demonstrate this using an emulator for a legacy game platform.

Aims

This module aims to help you:

- ▶ Acquire knowledge and understanding of professional software engineering in the context of legacy technology.
- ▶ Understand low-level computing principles and processor architectures.
- ▶ Apply low-level computing knowledge to the development of games and game-related software.

LO	Learning Outcomes	Assessment Criteria
1	Show a basic understanding of creative computing solutions using professional techniques.	Understand the fundamental use of cross-platform development tools and how constraints vary between different platforms.
2	Show a basic understanding of how to communicate effectively with stakeholders in writing, verbally and through adherence to coding standards.	Understand the importance of legibility at all levels of software development.
3	Show a basic development of the ability to reflect critically on and evaluate working methods and solutions.	Analyse critically the strengths and weaknesses of assembly code.
4	Show a basic understanding of the ability to conduct research, present knowledge in an academic format and apply that research to practice.	Apply basic research methodologies to understand historical developments in legacy platform capabilities and evolution.
6	Show a basic understanding of methods used to help set goals, manage workloads to meet deadlines and to work collaboratively.	Meet deadlines by planning available time effectively.

Academic Staff	Dr Edward Powley Brian McDonald (Moderator)	
Assignments	Constrained Development Task	80%
	Research Journal	20%
Indicative Hours	Sessions	27 hours
	Directed Reading	18 hours
	Constrained Development Task	56 hours
	Integration into Collaborative Game	20 hours
	Research Journal	15 hours
	Self-Directed Study	24 hours
	Self-Directed Studio Practice	40 hours
		200 hours

Each study block represents 600-hours of study. This means that 40 hours of study per week (including contact time) is expected, alongside a further 120-hours of studio practice across the assessment period.

Additional Resources

Session Plans & Materials:

<http://learningspace.falmouth.ac.uk/course/view.php?id=1506>

Assignment Briefs:

<http://github.com/falmouth-games-academy/bsc-assignment-briefs/tree/2017-18/comp310>

Reading List:

<http://resourcelists.falmouth.ac.uk/modules/comp310>