UNIVERSITY OF LEICESTER

Module Specification

CO1107   Algorithms, Data Structures and Advanced Programming

		Student Workload (hours)	
Academic Year:	2020/1	Lectures	24
Module Level:	Year 1	Seminars	
Scheme:	UG	Practical Classes & Workshops	
Department:	Informatics	Tutorials	8
Credits:	15	Fieldwork	
		Project Supervision	
		Guided Independent Study	102
		Demonstration	
		Supervised time in studio/workshop	16
		Work Based Learning	
		Placement	
		Year Abroad	
		Total Module Hours	150

Period:	Semester 2
Occurence:	E
Coordinator:	Thomas Ridge
Mark Scheme:	UG Module Mark Scheme

No.	Assessment Description	Weight %	Qual Mark	Exam Hours	Ass't Group	Alt Reass't
001	Coursework	100				

Intended Learning Outcomes

On completion of the module, successful students should be able to:
- Show how to solve simple problems involving common datatypes such as arrays, strings, lists, stacks, queues, trees, graphs;
- Describe standard algorithms such as sorting, searching, hashing, and tree and graph traversal. Work out problems which involve these algorithms;
- Write programs that use recursive programming techniques;
- Answer questions on supplementary topics such as data storage and file I/O, sockets, and threads.

Teaching and Learning Methods

Lectures, coursework, practical lab-based sessions, online resources (e.g. module webpage, electronic notes, Q+A forum, video tutorials).

Assessment Methods

Coursework (100%).

Pre-Requisites

-

Co-Requisites

-

Excluded Combinations

-

Guided Independent Study: Indicative Activities

Directed reading and videos, problem sets, writing note-based summaries.