

# **Object Oriented Systems Development**

# **Module Information**

2022.01, Approved

## **Summary Information**

Module Code	5504CSQR
Formal Module Title	Object Oriented Systems Development
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

#### Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

#### Partner Teaching Institution

Institution Name	
Oryx Universal College WLL	

### **Learning Methods**

Learning Method Type	Hours
Lecture	33
Practical	22

### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks

## Aims and Outcomes

Aims

To investigate the underpinnings of object orientated design through the unified modelling language. To implement an object oriented design with a modern language and application programming interface. To utilize a modern integrated development environment in developing object oriented program code.

#### After completing the module the student should be able to:

#### Learning Outcomes

Code	Number	Description
MLO1	1	Illustrate the concepts of object oriented design.
MLO2	2	Specify object oriented designs using the unified modelling language.
MLO3	3	Implement object oriented designs using object oriented program code.
MLO4	4	Employ an application programming interface using an integrated development environment.

### **Module Content**

Outline Syllabus	OOAD (Object Oriented Analysis & Design) Requirements Analysis Identifying Classes, Attributes & Operations. Identifying Object States / Activities. Verifying Class Design. Collaboration Amongst Objects. Visibility, Navigability & Inheritance. OOP (Object Oriented Programming) Classes & Objects. Arrays. Collections. Generics. Interfaces. Threading. Object Relational Mapping.
Module Overview	
Additional Information	This module explores the object oriented paradigm from analysis, through design, implementation and testing. Initially, the unified modelling language is employed to illustrate key concepts whilst later on; validated designs are matured to fully functioning oriented systems.

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	UML Report	40	0	MLO1, MLO2
Portfolio	OO Programming	60	0	MLO3, MLO4

### **Module Contacts**

#### Module Leader

Contact Name	Applies to all offerings	Offerings
Glyn Hughes	Yes	N/A

#### Partner Module Team

Contact Name Applies to all offerings Offerings	
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