# UNIVERSITY OF MAURITIUS MODULE SPECIFICATION SHEET

#### 1. GENERAL INFORMATION

Academic Year: 2017-2018

Semester(s): 2

Title	Code	Duration (hrs)	Nº of credits
Object Oriented Programming	ICDT 6002	Lectures: 15	2
		Practicals: 30	
		Seminars:	
		Tutorials:	
		Others (Specify):	
		Total: 30 hrs	

## 2. PRE-REQUISITE(S)/PRE-REQUIREMENT(S)

None.

#### 3. AIMS

The aim of this module is to introduce students to programming methodology and to object-oriented programming concepts. A practical approach will be used to help students understand the different programming concepts using the Java programming language. The module will consist of theoretical and practical lessons on both basic object-oriented programming programming constructs and programming constructs include control structures, arrays and files. Object-oriented encapsulation, programming concepts include abstraction, inheritance polymorphism.

#### 4. OUTLINE SYLLABUS

Basic Programming Concepts, Control Structures, Arrays, Files, Object-Oriented Concepts - Objects and Classes, Abstraction, Encapsulation, Inheritance and Polymorphism.

### 5. LEARNING OUTCOMES

After completing this module students will be able to:

- Understand the basic building blocks of a program
- Write Java programs using keyboard input.
- Write programs with different types of control structures including branching and repetition.
- Appreciate the importance of arrays in programming.
- Write programs that can read from or write data to files.
- Write object-oriented programs along with inheritance.
- Solve real-world problems through Object-Oriented software development;

### **6.** COORDINATORS:

	Module Coordinator	Programme Coordinator
Name	Associate Professor Dr Kavi Khedo	Mrs Zahra Mungloo-Dilmohamud
Department	Digital Technologies	Digital Technologies
Building	Phase 2	Phase 2
Room Number	2.21	
Phone No.	403-7400 (Ext: 7750)	7752
E-mail address	k.khedo@uom.ac.mu	z.mungloo@uom.ac.mu
Consultation		
Time		
Website		

## 7. LECTURER(S)

Name	Associate Professor Dr
	Kavi Khedo
Department	Digital Technologies
Building	Phase 2
Room Number	2.21
Phone No.	403-7400 (Ext: 7750)
E-mail address	k.khedo@uom.ac.mu
<b>Contact Hours</b>	
<b>Consultation Time</b>	
Contact Address	
(For P/T)	

### 8. VENUE AND HOURS/WEEK

Lab Monday 13:00 – 15:00
Lecture Friday 10:30 – 12:30
Lab Friday 13:00 – 15:00

# 9. MODULE MAP

Wk(s)	Hr(s)	Theme(s)	Lecture Title(s)	L, P, S, V,
	L+P			T, Test
1	2+4	Programming	<ul> <li>Basic Programming Concepts</li> </ul>	L+P
		Methodology		
2	2+4	Programming	Basic Programming Concepts & Control	L+P
		Methodology	Structures	
3	2+4	Programming	Control Structures	L+P
		Methodology		
4	2+4	Programming	Arrays and Files	L+P
		Methodology		
5	2+4	OO Concepts	Fundamentals of Object Technology	L+P
			<ul> <li>Object-Oriented Programming Languages</li> </ul>	
6	2+4	OO Programming	Classes and Objects	L+P
7	2+4	OO Programming	Inheritance, Polymorphism	L+P
8	1+2	OO Programming	Abstract Classes and Interfaces	L+P

Abbreviations: L: Lectures, P: Practicals, T: Tutorials, V: Visits, S: Seminars

## 10. RECOMMENDED BOOKS/JOURNALS/WEBSITES

- 1. Introduction to Programming in Java by Robert Sedgewick.
- 2. Java How to Program" by Deitel, 9th Edition, Prentice Hall
- 3. Thinking in Java 4th Edition Electronic Version (eBook)

## 11. ESSAY(S)/ASSIGNMENT(S)/PRACTICAL(S)

## (i) Written Examination

Paper Duration:	2 hrs
Weighting (%):	70%

# (ii) Continuous Assessment

	Weighting (%)
Practical Test/Assignment	15%
Written Test	15%
Weighting (%):	30%