

Proposed Academic Year	2021/ 2022	Last Reviewed Academic Year	2020/2021
Course Code	INTE320	Course Title	Object Oriented Design
Credit hours	3	Level of study	Undergraduate
College / Centre	COBA	Department	MIFS
Co-requisites	None	Pre-requisites	INTE305

1. COURSE OUTLINE

The Course object-oriented design using java will help students to program using java programing language.

The students will be able to design an application with professional coding and performance standards

2. AIMS

The aim of this course is to enable students to demonstrate and apply object-oriented programing skills and knowledge in the development of applications. In this course, the students will cover topic such as Objects and Classes, Inheritance and Polymorphism, Event and GUI programming using Java, and Multithreading using java. The students will also use different tools such as blue j etc.

3. LEARNING OUTCOMES, TEACHING, LEARNING, ASSESSMENT METHODS, and Graduate Attributes Mapping

Learning Outcomes (Definitive) Upon successful completion of this course, students will be able to:	Lea	ching and rning methods <i>licative)</i>		essment licative)		duate Attributes oping
Describe the basic principle of object- oriented programin using Java.		e.g., lectures, on videos tutorials a seminars, online group discussion using LMS, independent readings, individ or group work, presentation	and ns	e.g., tests, assignments, individual or grou project, participa	•	Knowledge of a discipline.
2 Describe Java architecture and us Java APIs	sing	e.g., lectures, on videos tutorials a seminars, online group discussion using LMS, independent readings, individ or group work, presentation	and ns	e.g., tests, assignments, individual or grou project, participa	•	Knowledge of a discipline.



3 write, compile and execute Java application	e.g., lectures, online videos tutorials and seminars, online group discussions using LMS, independent readings, individual or group work, presentation	e.g., tests, assignments, individual or group project, participation	Knowledge of a discipline.
4 Design and Analysis multithreaded programming, graphical user interfaces, and event-driven programming	e.g., lectures, online videos tutorials and seminars, online group discussions using LMS, independent readings, individual or group work, presentation	Ca e.g., tests, assignments, individual or group project, participation se Study report	Knowledge of a discipline.

4. ASSESSMENT WEIGHTING

Assessment	Percentage of final mark (%)
Final	30
MID	30
Assignment-Project	30
Participation	10
TOTAL	100%

5. ACHIEVING A PASS

Students will achieve 3 credit hours for this course by achieving a minimum overall score of 50% *NB *Ensure that ALL learning outcomes are considered.*

6. COURSE CONTENT (Indicative)	
LECTURE TOPIC	TIME (HOURS)
Introduction to object-oriented programing and role of Java	01
Objects and Classes:	06
Inheritance and Polymorphism	06
Multithreading in java	06



GUI programming and Event handling:	10
Event handling in java, Event types, etc.	10
Graphical user Interface designing Basics, Frames, Panels, Layout Managers, Border Layout,	
Grid Layout, GUI components like Buttons, Check Boxes, Radio Buttons, Labels, Text Fields,	16
Text Areas, Combo Boxes, Lists, Scroll Bars, Sliders, Windows, Menu etc.	
TOTAL HOURS	45
Plus, RECOMMENDED INDEPENDENT STUDY HOURS	
TOTAL COURSE HOURS	

7. RECOMMENDED READING

Core text/s:

Beginning Java Programming: The Object-Oriented Approach 1st Edition by <u>Bart Baesens</u>

OBJECT ORIENTED PROGRAMMING WITH JAVA

By M. T. SOMASHEKARA, D. S. GURU, K. S



Library + online resources:
ASU library
ASU online resources (ProQuest and e-library) and
Sultan Qaboos University Library.