Proposed Academic Year	2021/ 2022	**Last Reviewed Academic Year**	2020/2021
Course Code	INTE130	**Course Title**	Object Oriented Programing
Credit hours	3	**Level of study**	Undergraduate-Year Second
College / Centre	COBA	**Department**	MIFS
Co-requisites	None	**Pre-requisites**	Computer Programming I

1. COURSE OUTLINE

[This course extends computer programming I, where students will further develop their programing skills in terms of programming logics, real industry problem solving. Object oriented programming elements inheritance, polymorphism, abstraction and encapsulation are introduced and applied to implement common data structures and solutions

2. AIMS

[This course aims to extend Computer Programming I and develop students programming capacity using object-oriented programming (OOP) to solve real industry problems.

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**:**	**Teaching and Learning methods** ***(Indicative)***	**Assessment** ***(Indicative)***	**Graduate Attributes Mapping**
1. describe inheritance & polymorphism	Lectures and labs	In-class tests, quizzes	Knowledge of a discipline
2. Explain encapsulation and abstraction	Lectures and labs	In-class tests, quizzes	Knowledge of a discipline
3. Solve real industry problems using OOP	Lectures and labs	In-class tests, quizzes	Knowledge of a discipline Commitment to national development and Omani ethical values. Innovative spirit. Global insight
4. communicate effectively as a team member	Lectures and labs	In-class tests, quizzes	Knowledge of a discipline.

			Adaptability to changing environments.

4. ASSESSMENT WEIGHTING

Assessment	Percentage of final mark (%)
First exam	30%
Course work / project	30%
Final exam	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 taken into account

6. COURSE CONTENT (Indicative)

LECTURE TOPIC	TIME (HOURS)
Introduction to Object oriented programming	9
Inheritance & Polymorphism	9
Encapsulation and abstraction	9
Exceptions handling	9
Stacks and collections	9

TOTAL HOURS	**45**
Plus **RECOMMENDED INDEPENDENT STUDY HOURS**	
TOTAL COURSE HOURS	**45**

7. RECOMMENDED READING

Core text/s:

Lavin, P. (2006). *OBJECT-ORIENTED PHP: concepts, techniques, and code*. No Starch Press.
ISBN-13: 978-1593270773

Vemuri, V. K. (2016). Web programming for business: PHP object-oriented programming with Oracle by David Paper: New York, NY, Routledge, 2015, 280 pp., 160(hardback), 59.95 (paperback), 59.95(Kindleedition),
ISBN-13: 978-0415818049

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