# ASSUMPTION UNIVERSITY VINCENT MARY SCHOOL OF ENGINEERING, SCIENCE AND TECHNOLOGY

# Course Outline ITX 4282: Selected Topic in Data Analytics

**Course Status:** Major Elective Course 3 credits

Pre-requisite: -

**Semester:** 1 / 2024

Class Meeting: Section: 541 Day: Thursday, Time: 9:00 – 1200

**Instructor:** Asst. Prof. Dr. Benjawan Srisura **Office:** Building: VME, Floor: 3, Room: 0305

E-mail: benjawansrs@au.edu

#### **Textbook:**

Data Analytics Essentials You Always Wanted to Know (Self-Learning Management Series), Bianca Szasz, Vibrant Publishers, 2024, ISBN 13: 978-1-63651-118-4

### **References:**

https://analytics.google.com/analytics/academy/

- Introduction to Google Analytics: A Guide for Absolute Beginners, Todd Kelsey, Apress Media, 2017, ISBN 978-1-4842-2828-9, e-ISBN 978-1-4842-2829-6, DOI 10.1007/978-1-4842-2829-6
- Learning Google Analytics Create Business Impact and Driving Insights, Mark Edmondson, O'REILLY Media, 2023.
- Google Analytics Breakthrough, Feras Alhlou, Shiraz Asif, and Eric Fettman, Executive Storyteller's Guide (CreateSpace Independent Publishing Platform, 2015.

#### **Mark Allocation:**

Assignment, Homework 30%
Term Project 30%
Final Examination 40%

Total 100%

### **Other Requirements:**

- 80% attendance is required.
- Plagiarism is not accepted. Included in the definition of plagiarism are deliberately copying the work of another student, copying directly from any published work without using quotation marks, failing to acknowledge sources used in submitted assignments with proper citation methods, re-submitting an assignment used in one course as an original piece of work for another course. Work that shows evidence of plagiarism will be penalized in accordance with the seriousness of the case. This may involve half-mark reductions, and the student's name will be recorded for future reference on the Information Technology Department's Plagiarism Offenders List for minor infractions (the first time), zero marks for more serious cases if the student commits this offense for a second time in the same or any other course and the student's names will be reported to the Head of Department who will ensure that they are reported to the appropriate authority within the university so that further action may be taken.

## **Lecture Schedule:**

Weeks	Date	Topics	Remarks
1	06/06/2024	Course Introduction	-
2	13/06/2024	Introduction to Data Analytics	-
3	20/06/2024	Data is everywhere. Ask questions with Data-Driven Decisions	Assignment 1
4	27/06/2024	Data Preparation and Exploration	Assignment 2
5	04/07/2024	Data Cleaning	Assignment 3
6	11/07/2024	Analyzing Data to Answer Questions	Assignment 4
7	18/07/2024	Descriptive Analytics	Assignment 5
8	25/07/2024	Project Proposal Presentation	10%
		Midterm Examination	-
9	08/08/2024	Diagnostic Analytics	Assignment 6
10	15/08/2024	Project Progress Presentation I	5%
11	22/08/2024	Predictive Analytics	Assignment 7
12	29/08/2024	Project Proposal Presentation II	5%
13	05/09/2024	Prescriptive analytics	Assignment 8
14	12/09/2024	Story Telling with Data Visualization	Assignment 9
15	19/09/2024	Capstone: Case Studies	Assignment 10
16	26/09/2024	Project Final Defense	10%
		Final Examination	40%

CSX2003 Principles of Statistics