CB3021: BUSINESS DISCOVERY METHODS

Effective Term
Semester A 2025/26

Part I Course Overview

Course Title
Business Discovery Methods

Subject Code
CB - College of Business (CB)
Course Number
3021

Academic Unit
Decision Analytics and Operations (DAOS)

College/School
College of Business (CB)

Course Duration
One Semester

Credit Units
3

Level
B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction
English

Medium of Assessment
English

Prerequisites
Nil

Precursors
CB2200 Business Statistics

Equivalent Courses
Nil

Exclusive Courses
Nil

Part II Course Details

Abstract
This course provides an in-depth exploration of business discovery methods and research methodology, essential for understanding and analyzing business phenomena. Students will learn the foundational principles of research, including

the scientific method, and how to design effective research studies. Key topics include formulating research questions, developing hypotheses, and operationalizing concepts. The course covers various types of surveys, both online and offline, emphasizing the selection process, participation factors, and error minimization. Students will gain practical skills in questionnaire design, including question formulation, response formats, and layout. Core concepts of inference and reasoning, such as probability, sampling, and hypothesis testing, will be explored. The course includes hands-on data analysis using SPSS, covering data preparation, hypothesis testing, and regression models. Additionally, students will be introduced to data mining techniques and pattern discovery, equipping them with the skills to uncover valuable insights from complex data sets.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Evaluate the role of discovery methodologies in business knowledge acquisition and decision-making.	20	x	x	
2	Identify and apply appropriate methodologies for discovering business facts, data, and knowledge.	20		x	
3	Analyze and synthesize techniques for collecting and analyzing qualitative and quantitative data.	20		x	
4	Propose solutions to business problems using relevant research concepts and data.	30			x
5	Collaborate effectively with peers through discussions and teamwork on research projects.	10			x

A1: Attitude
Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability
Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments
Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

	LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures and Discussions	Students will participate in lectures and discussions to evaluate the role of discovery methodologies in business knowledge acquisition and decision-making.	1, 5	

2	Hands-on Computer Workshops	Students will engage in hands-on workshops to identify and apply appropriate methodologies for discovering business facts, data, and knowledge.	2, 5	
3	Research Projects	Students will conduct individual and group research projects to analyze and synthesize techniques for collecting and analyzing qualitative and quantitative data.	3	
4	Case Study Development and Presentation	Students will develop and present case studies to propose solutions to business problems using relevant research concepts and data.	4	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	Group Project Collaborate with peers to identify and apply appropriate research methodologies to a real-world business problem. The project includes a written report and a presentation.	2, 3, 4	35	Students can use AI tools to write their analysis program and suggest analysis results. Students are required to critically analyse these AI-generated pieces of work.	Yes
2	Mid-Term Test A written test covering the theoretical aspects of discovery and research methodologies, including key concepts and techniques.	1, 2	20	-	No

3	Class Discussion Active participation in class discussions, demonstrating critical thinking, engagement, and the ability to challenge assumptions.	1, 5	10	-	No

Continuous Assessment (%)

65

Examination (%)

35

Examination Duration (Hours)

2

Assessment Rubrics (AR)

Assessment Task

Group Project

Criterion

1.1 Understanding and Application of Research Methodologies.
1.2 Analysis and Synthesis of Data

Excellent (A+, A, A-)

1.1 Demonstrates exceptional understanding and application, with innovative and accurate use of methodologies.
1.2 Provides comprehensive and insightful analysis, effectively synthesizing qualitative and quantitative data.

Good (B+, B, B-)

1.1 Shows solid understanding and application, with correct and detailed use of methodologies.
1.2 Conducts thorough analysis, accurately synthesizing data.

Fair (C+, C, C-)

1.1 Demonstrates basic understanding and application, with generally correct use of methodologies.
1.2 Performs adequate analysis, generally synthesizing data correctly.

Marginal (D)

1.1 Shows limited understanding and application, with minimal and partially correct use of methodologies.
1.2 Develops and implements weak solutions.

Failure (F)

1.1 Fails to demonstrate understanding or application, with incorrect or missing use of methodologies.
1.2 Fails to develop or implement viable solutions.

Assessment Task

Mid-term Test

Criterion

2.1 Understanding of Theories and Concepts
2.2 Application of Knowledge

Excellent (A+, A, A-)

2.1 Demonstrates excellent understanding with accurate and comprehensive responses.
2.2 Applies knowledge effectively to various scenarios, with insightful and accurate application.

Good (B+, B, B-)

2.1 Shows good understanding with mostly accurate and detailed responses.
2.2 Applies knowledge accurately to most scenarios, with detailed application.

Fair (C+, C, C-)

2.1 Demonstrates basic understanding with generally accurate responses.
2.2 Applies knowledge adequately to scenarios, with generally correct application.

Marginal (D)

2.1 Shows limited understanding with partially accurate responses.
2.2 Applies knowledge minimally to scenarios, with partially correct application.

Failure (F)

.1 Fails to demonstrate understanding with mostly inaccurate responses.
2.2 Fails to apply knowledge correctly to scenarios.

Assessment Task

Class Discussion

Criterion

Active participation in class discussions, demonstrating critical thinking, and engagement.

Excellent (A+, A, A-)

Consistently contributes insightful and relevant points, shows deep engagement and critical thinking.

Good (B+, B, B-)

Frequently contributes relevant points, shows good engagement and critical thinking.

Fair (C+, C, C-)

Occasionally contributes relevant points, shows satisfactory engagement and some critical thinking.

Marginal (D)

Rarely contributes relevant points, shows minimal engagement and limited critical thinking.

Failure (F)

Does not contribute relevant points, shows no engagement or critical thinking.

Part III Other Information

Keyword Syllabus

Discovery ideas, judgement and decision making, hypothesis. Discovery process, induction, deduction, falsification.
Reliability, validity Ethics
Interview Focus group
Observation, survey.

Statistical Inference and Reasoning. Data Analysis using SPSS. Communication of Research Results. Data mining.

Reading List

Compulsory Readings

	Title
1	Zikmund, Babin, Carr, Griffin, "Business Research Methods" Cengage

Additional Readings

	Title
1	Donald R. Cooper, Pamela S. Schindler, "Business research methods" McGraw-Hill.
2	Saunders, Lewis and Thornhill, "Research Methods for Business Students" 6th ed. Pearson.
3	Riffe, Lacy, Fico "Analyzing Media Messages: Using Quantitative Content Analysis inResearch" Routledge
4	Siegel, Davenport "Predictive Analytics: The power to predict who will click, buy, lie,or die" Wiley
5	Provost, Fawcett "Data Science for Business: What you need to know about data miningand data-analytic thinking" O'Reily Media
6	Goodman, Kuniavsky, Moed "Observing the User Experience" Morgan Kaufmann
7	Rea, Parket "Designing and Conducting Survey Research: A Comprehensive Guide" Jossey-Bass
8	Tuffery, Stéphane "Data Mining and Statistics for Decision Making" Wiley
9	Linoff, Gordon "Data Mining Techniques: for Marketing, Sales, and CustomerRelationship Management" Wiley
10	May "The New Know: Innovation Powered by Analytics", Wiley