

MS3127: GLOBAL BUSINESS LOGISTICS

Effective Term

Semester B 2024/25

Part I Course Overview

Course Title

Global Business Logistics

Subject Code

MS - Department of Decision Analytics and Operations

Course Number

3127

Academic Unit

Department of 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

CB2201 Operations Management

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course provides students with an understanding of the business logistics behind managing a successful supply chain. The course begins with the strategic sourcing and procurement of goods and materials and proceeds to look at challenges

that arise as the goods and materials move towards the end-users. Students study methods to assess different logistical decisions and the risks involved with such decisions. They also look at technological developments and market trends, and how these factors impact business logistics.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Explain the role of business logistics in various stages of the supply chain, from procurement to distribution and/or disposal.	20	x	x	
2	Identify risks and challenges that impact a company's transfer of goods from suppliers to end-users and recommend strategies to reduce risks and costs.	25	x	x	
3	Evaluate different logistical decisions using performance metrics and recommend solutions for various business situations.	25		x	x
4	Evaluate the effects of technology and market trends on logistical operations and describe ways for businesses to leverage opportunities and mitigate risks arising from such trends.	30		x	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	Lecture	Students will attend and actively participate in lectures to understand the role of business logistics in various stages of the supply chain, from procurement to distribution and/or disposal.	1, 2, 3, 4	2

2	In-class Discussion	Students will engage in in-class discussions to identify and analyse risks and challenges that impact the transfer of goods from suppliers to end-users, and to brainstorm strategies to reduce risks and costs.	2, 3, 4	1
3	Peer Discussion	Students will collaborate with classmates on a group project to evaluate different logistical decisions using performance metrics. This project will involve researching real-world business scenarios and recommending solutions.	1, 2, 3, 4	2

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Assignment & In-class Exercises Assignment: Complete a series of written assignments that require analysis and explanation of the role of business logistics in various stages of the supply chain. In-Class Exercises: Participate in exercises that include case studies, problem-solving activities, and discussions on identifying risks and challenges in logistics, evaluating logistical decisions using performance metrics, and analyzing the impact of technology and market trends on logistics operations.	1, 2, 3, 4	40	

2	Group Project Work in teams to research and present a comprehensive project that evaluates different logistical decisions using performance metrics. The project should cover aspects such as risk identification, cost reduction strategies, and the effects of technology and market trends on logistics. The project will culminate in a written report and/or an oral presentation.	1, 2, 3, 4	20	
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Continuous Assessment (%)

60

Examination (%)

40

Examination Duration (Hours)

2

Additional Information for ATs

Written examination The examination will assess the students' ability to apply the key concepts of business logistics management and solve business problems.

Assessment Rubrics (AR)**Assessment Task**

Assignments & in-class exercises

Criterion

Apply to brainstorm ideas and to gain exposure on dealing with different logistics issues.

Excellent (A+, A, A-)

Strong evidence of grasping managerial issues on the logistics behind procuring goods and ultimately delivering such goods to end-users, as outlined in CILOs. Clearly and correctly structures most critical points and makes important contributions to the assigned questions or problems.

Good (B+, B, B-)

Evidence of grasping managerial issues on the logistics behind procuring goods and ultimately delivering such goods to end-users, as outlined in CILOs. Clearly and correctly state some critical points and contributions of the assigned questions or problems.

Fair (C+, C, C-)

Some evidence of grasping managerial issues on the logistics behind procuring goods and ultimately delivering such goods to end-users, as outlined in CILOs. Understanding of the subject, ability to develop solutions to simple and basic problems in the assigned questions and problems.

Marginal (D)

Sufficient familiarity with the managerial issues on the logistics behind procuring goods and ultimately delivering such goods to end-users, as outlined in CILOs. State a few critical points and marginal contributions of the assigned questions and problems.

Failure (F)

Little evidence of grasping managerial issues on the logistics behind procuring goods and ultimately delivering such goods to end-users, as outlined in CILOs. State no critical points and no contributions of the assigned questions and problems.

Assessment Task

Group project

Criterion

Ability to analyse business logistics issues and real-world business problems.

Excellent (A+, A, A-)

Critically discuss issues and apply most relevant frameworks to analyse logistical issues in real-world problems. Critical problem-solving skills and excellent presentation skills are expected.

Good (B+, B, B-)

Critically discuss issues and apply relevant frameworks to analyse logistical issues in real-world problems. Critical problem-solving skills and good presentation skills are expected.

Fair (C+, C, C-)

Discuss issues and apply somewhat relevant frameworks to analyse logistical issues in real-world problems. Acceptable problem-solving skills and presentation skills are expected.

Marginal (D)

Attempt to discuss issues and apply frameworks to analyse logistical issues in real-world problems. Fair problem-solving skills and presentation skills are expected.

Failure (F)

Does not discuss relevant issues nor attempt to analyse logistical issues in real-world problems. Poor problem-solving skills and presentation skills are expected.

Assessment Task

Final exam

Criterion

Ability to demonstrate and apply the key concepts and the use of tools and techniques in solving business logistics problems.

Excellent (A+, A, A-)

Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

Good (B+, B, B-)

Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

Fair (C+, C, C-)

Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.

Marginal (D)

Sufficient familiarity with the subject matter to enable the student to progress without repeating the course.

Failure (F)

Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited or irrelevant use of literature.

Part III Other Information

Keyword Syllabus

- i) **Role of logistics in supply chain management:** Interaction with procurement, production, and inventory decisions, value created by business logistics
- ii) **Transportation & distribution:** Transportation system, modal cost structures, competition and pricing principles; distribution strategies for B2B vs B2C; analysis via vehicle routing problem and flow problems (e.g. minimum cost flow, lossy network flow); facility location and network analysis via mathematic programming
- iii) **Performance measures and risk assessment:** Balance scorecard, KPI, financial statement impact
- iv) **Sustainable logistics:** Challenges and opportunities; product returns and reverse logistics
- v) **Global logistics management:** Challenges and opportunities; terminologies, documentations, and arrangements for international logistics and trade such as terms of sales
- vi) **Contemporary issues:** Logistical challenges faced by multi-channel retailers; technology (blockchain, platform, internet of things, etc); supply chain finance; cooperation and competition between retail and logistics company

Reading List**Compulsory Readings**

Title	
1	Introduction to Logistics Systems Management, Latest Edition Gianpaolo Ghiani, Gilbert Laporte, Roberto Musmanno

Additional Readings

Title	
1	Wessel Pienaar, et., Business Logistics Management, Latest Edition., Oxford University Press
2	André Langevin Diane Riopel , Logistics Systems: Design and Optimization, Springer
3	Pierre A.David, International Logistics: the Management of International Trade Operations, Latest Edition, Cicero Books, LLC