هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

2023
TP-153

Course Specification
(Bachelor)

Course Title:	**Advanced Logistics**
Course Code:	**INE 5353**
Program:	Bachelor of Industrial Engineering
Department:	Industrial Engineering
College:	Engineering
Institution:	King Khalid University
Version:	2
Last Revision Date:	22/6/1445

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours: (3)					
2. Course type					
A.	☐University	☐College	☒ Department	☐Track	☐Others
B.	☐Required		☒ Elective		
3. Level/year at which this course is offered: (.....)					
4. Course general Description:					
The aim of the course is to introduce the students to advanced logistics, to control the advanced logistics activities for in housing and out housing area. The course will help students to learn the latest logistics 4.0 technologies that can make smart logistics activities suitable to Industry 4.0.					
5. Pre-requirements for this course (if any)**:**					
NIL					
6. Co-requisites for this course (if any)**:**					
NIL					
7. Course Main Objective(s):					
The aim of the course is to make students aware of the latest logistics technology, i.e., logistics 4.0, also known as smart logistics, to fulfill the demand of small and large enterprises. Students will be exposed to various logics model i.e., 1PL, 2PL, 3PL, 4PL and 5PL. The students will learn how to select potential logistics service providers.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	45	100
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	NIL
3.	Field	NIL
4.	Tutorial	15
5.	Others (specify)	NIL
Total		45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Understanding Logistics and Logistics 4.0	KI	Lectures and tutorials	Assignments Midterm Exam Final Exam
1.2	Understanding 1PL, 2PL, 3PL,4PL and 5PL, Significance of 3PL and Advanced 3PL.	K3		
2.0	Skills			
2.1	Adoption of logistics 4.0 technologies	S1	Lectures and tutorials	Assignments Midterm Exam Final Exam
2.2	Selection criteria for 3PL service providers	S4		
2.3	Evaluation of 3PL service providers			
2.4	Modeling 3PL service providers using AHP and FAHP			
3.0	Values, autonomy, and responsibility			
3.1	Modeling the selection of 3PL service providers using MCDM	VI, V2	Lectures and tutorials	Assignments Midterm Exam Final Exam
3.2	Communicate effectively among team for MCDM modeling			

C. Course Content

No	List of Topics	Contact Hours

1.	Introduction to Logistics Service Pyramid, Introduction to Advanced Logistics or Logistics 4.0	3
2.	Types of Logistics in Product Supply Chain, Logistics Evolution	3
3.	Types of Logistics, Forward Reverse Logistics and Reverse Logistics	3
4.	Introduction to 1PL, 2PL, 3PL,4PL and 5PL, Significance of 3PL and Advanced 3PL.	3
5.	Linear and Circular Economy?	3
6.	Role of Reverse Logistics in Circular Economy, Important terms in Reversed Logistics:	3
7.	Smart Technologies in Logistics 4.0	3
8.	Blockchain, Big data analytics, Artificial intelligence, Automating warehouses, Autonomous vehicles, Sustainability through Technology	3
9.	Modes of Transportation, Air, Land, Marine, Pipe, Train etc. LTL, LCL, FTL, FCL and Bulk	3
10.	Incoterms: EXW (Ex Works), FCA (Free Carrier), FAS (Free Alongside Ship), FOB (Free on Board), CFR (Cost and Freight), CIF (Cost, Insurance and Freight), CIP (Carriage and Insurance Paid).	3
Total		30

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	6 to 8 Assignments	2, 3, 4, 5, 6, 7, 8, 9	30
2.	Quiz 1	7	
3.	Quiz 2	12	
4.	2 Mid Term Exam	5, 10	30
5.	Final Exam	16	40
...			100

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	• John Mangan, Global Logistics and Supply Chain Management,
Supportive References	• P Schönsleben, Handbook Integral Logistics Management: Operations and Supply Chain Management Within and Across Companies • Donald Bowersox; David Closs, Supply Chain Logistics Management 4th Edition

Electronic Materials	• The International Journal of Logistics Management, Emerald • International Journal of Logistics Systems and Management, Inderscience
Other Learning Materials	• YouTube videos

2. Required Facilities and equipment

Items	Resources
Facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	projector
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Indirect (Questionnaire)
Effectiveness of Students assessment	Faculty	Direct
Quality of learning resources	Program Leaders	Direct
The extent to which CLOs have been achieved	Faculty	Direct
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	REVIEWED BY CURRICULUM COMMITTEE **APPROVED BY QUALITY COMMITTEE**
REFERENCE NO.	**9-6-47**
DATE	**25/06/1447**