هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission
اعتماد
NCAAA
2024
TP-153

Course Specification
(Bachelor)

Course Title:	*Advanced warehouse Management.*
Course Code:	*INE 5355.*
Program:	*Bachelor in Industrial Engineering.*
Department:	*Industrial Engineering.*
College:	*College of Engineering.*
Institution:	*King Khalid University, Abha, Saudi Arabia.*
Version:	*Version 3*
Last Revision Date:	*08/12/2025*

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours: (.....)					
2. Course type					
A.	☐ University	☐ College	☒ Department	☐ Track	☐ Others
B.	☐ Required		☒ Elective		
3. Level/year at which this course is offered: (Level 10/Year 5)					
4. Course general Description:					
The students will learn the fundamentals principles of the physical management of stock, why companies hold stock, how they acquire it and how they control and distribute it efficiently. They will gain an understanding of how warehouse and distribution operation work and they are managed efficiently. They will also gain sufficient knowledge to allow them to develop solutions to warehouse problems					
5. Pre-requirements for this course (if any)**:**					
INE 4351					
6. Co-requisites for this course (if any)**:**					
7. Course Main Objective(s):					
At the end of the course, students will be able to establish warehouse and distribution objectives, analyze a stock list, select appropriate work methods, select the appropriate type of equipment, create a warehouse layout, calculate labor and equipment requirements, identify information for control purposes and create a transport schedule.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	60	100%
2	E-learning	0	0%
3	Hybrid ● Traditional classroom ● E-learning	0	0%
4	Distance learning	0	0%

3. Contact Hours (based on the academic semester)

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

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

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Understand the role of warehousing and stores	**K1, K2**	**Lectures and Tutorials**	**Quizzes Assignments**

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
				Mid Term Final Exam
1.2	Understand the management and the control of inventories	**K1, K2**	**Lectures and Tutorials**	**Quizzes Assignments Mid Term Final Exam**
1.3	Understand the distribution planning and management	**K1, K2**	**Lectures and Tutorials**	**Quizzes Assignments Mid Term Final Exam**
2.0	**Skills**			
2.1	Explain the warehouse selection and layout	**S1**	**Lectures and Tutorials**	**Quizzes Assignments Mid Term Final Exam**
2.2	Define the different operations of warehouse handling	**S1**	**Lectures and Tutorials**	**Quizzes Assignments Mid Term Final Exam**
2.3	Explain the warehouse procedures	**S4**	**Lectures and Tutorials**	**Quizzes Assignments Mid Term Final Exam**
2.4	Develop solutions to warehouse problems	**S4**	**Lectures and Tutorials**	**Quizzes Assignments Mid Term Final Exam**
3.0	**Values, autonomy, and responsibility**			
3.1	Identify information for warehouse control	**V1**	**Lectures and Tutorials**	**Quizzes Assignments Mid Term Final Exam**

C. Course Content

No	List of Topics	Contact Hours

1.	**Warehousing function**: Strategic aspects of warehousing, The value chain, Modern warehouse operations.	6
2.	**Inventory, Stock Analysis and control**: Product classification, Demand analysis, ABC analysis, Product handling groups, Replenishment methods	8
3.	**Warehouse site selection and layout:** site selection, principles of warehouse layout, warehouse areas, external storage.	8
4.	**Mechanical handling and storage equipment**: Type of storage equipment, Types of racking, principles of MHE, choosing MHE, types of MHE.	8
5.	**The Warehouse and Operational Principles**: Warehouse operations, Receiving, Location methods in the warehouse, Methods of picking, Despatching activity, Organising for flow	9
6.	**Warehouse Information Communications Technology**: Importance of information, Decision-making and ICT, Warehouse ICT applications, Systems implementation.	6
7.	**Productivity, Cost and Service**: Framework for analysis, Key costs, Key productivity drivers, Understanding productivity, Customer service, Added value	8
8.	**Distribution management**: Transport methods, vehicle selection, distribution planning and performances, routes planning.	7
Total		**60**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quizzes, Tests and assignments	After completing some specified topics	25%
2.	Projects, Reports, presentations	After completing some specified topics	10%
3.	Mid Term	7	25%
4.	Final Exam	13	40%
5.	Quizzes, Tests and assignments	After completing some specified topics	25%

*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	Warehouse Management: The Definitive Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse, 4th Edition Gwynne Richards , ISBN-13 978-1789668421November 30, 2021
Supportive References	The logistics and supply chain toolkit : over 100 tools for transport, warehousing and inventory management, Gwynne Richards, Susan Grinsted, 4th edition ISBN Ebook 978 1 3986 1338 6, 2024 The Handbook of Logistics and Distribution Management by Alan Rushton, Phil Croucher, and Peter Baker.7th edition 2022 Excellence in Warehouse Management: How to Minimise Costs and Maximise Value, Stuart Emmett, John Wiley & Sons, Ltd, ISBN 13 978-0-470-01531-5, ISBN 10 0-470-01531-4,June 2005
Electronic Materials	PowerPoint Slides, U tube Videos
Other Learning Materials	Online research Papers

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/ Faculty /Head of department	Indirect assessment based on survey (Course evaluation survey/Student's surveys, Faculty surveys etc…) Faculty Performance Profile

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of Students assessment	Students/ Independent faculty	Indirect assessment based on survey (Course evaluation survey/ Student's surveys), Assessment is checked by an independent faculty.
Quality of learning resources	Student and faculty	Indirect assessment based on survey (Evaluation of IT and Websites, learning resources surveys)
The extent to which CLOs have been achieved	Quality Committee	Direct through Rubrics analysis
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**