Form (H)
Short course description

Course title: **Inventory Control**	Course number and code: **OPER 322**
Previous course requirement: **OPER 213**	Language of the course: Arabic/English
Course level: **6th**	Effective hours: 3(2+2+0)

Course description

In this course the students get basic knowledge of inventory theory and its models. Various inventory costs are discussed and the demand nature. Deterministic models (Static and Dynamic): Economic Order Quantity model (EOQ), EOQ with shortages, Economic Production Quantity model (EPQ), EPQ with shortages, Multi–items model with space or capital constraints, Dynamic demand model: Wagner–Whitin Algorithm, Silver–Meal Heuristic, Introduction to probabilistic demand models, a continuous review model (CRM).

Course objectives

This course aims to familiarize student with basic knowledge of inventory theory and its applications, and to provide student with tools and methods needed to build mathematical models of real life problems related to inventory and demand situations, to apply appropriate solutions and to evaluate inventory systems.

Learning outcomes (understanding, knowledge, and intellectual and scientific skills)
After studying this course, the student is expected to be able to:

- **acquire a proper way of thinking about how to investigate inventory problems and then formulate them.**
- **identify basic standards for inventory systems.**
- **build mathematical models of real life problems related to inventory and demand situations.**
- **use appropriate mathematical techniques to solve these models.**

Textbook adopted and supporting references

Title of the book	Author's name	Publisher's name	Date of publication
Introduction to Inventory Control	**Zain albalkhi**	**KSU**	**2005**
Operations Research: An Introduction	**Hamdy A Taha**	**Pearson**	**Tenth edition**
Introduction to Operations Research	**Frederick S. Hillier and Gerald J. Lieberman.**	**Holden day**	**Tenth edition**

Principles of Inventory and Materials Management	**Richard J. Tersine**	**Prentice Hall**	**Fourth edition**
Inventory Control and Management	**Donald Waters**	**Wiley,**	**Second edition**