


Sub.	Course Description – توصيف مقرر دراسي	الموضوع	 <b>كليات المعرفة</b> ALMAAREFA COLLEGES
Date		التاريخ	

Course Code & No	IE311		رقم المقرر ورمزه
Course Name	Industrial Operations Management -1		اسم المقرر
Credit Hours	3 (3+2+0)		عدد الساعات المعتمدة
Pre-requisite	STAT 103		المتطلب السابق

General Description	توصيف عام
Introduction to operation management and productivity; Forecasting methods and analysis; Capacity planning; Inventory management; Material requirement planning.	

Course Objectives	أهداف المقرر
<p>Introduce to the students the managerial concepts and the most important operation management functions during the production process in production system.</p> <p><b>By the end of the course, each student should be able to</b></p> <ul style="list-style-type: none"> <li>Recognize the operation function in production system</li> <li>Measure and analyze the system productivity</li> <li>Predict the forecasting demands of the production</li> <li>Design effective capacity and analyse bottleneck and estimated values of capacity</li> <li>Able to calculate and determine material requirement</li> <li>Develop inventory control models and manage inventory</li> </ul>	

Course Outlines	مفردات المقرر
<ul style="list-style-type: none"> <li>Introduction to operations management and productivity</li> <li>Forecasting methods and analysis; Introduction to forecasting, Steps in forecasting system, Forecasting approaches (Qualitative and Quantitative), Monitoring and controlling forecasts, Forecasting applications/cases</li> <li>Capacity planning; Design and effective capacity, Demand and capacity management, Bottleneck analysis and management, Break even analysis and EMV to capacity decision.</li> <li>Inventory management; Functions of Inventory, ABC analysis, Inventory models, EOQ, Reorder Point, POQ, Discount model, Safety Stock, Fixed Period model</li> <li>Material requirement planning; Master production schedule, bill of material, MRP plan, lot size techniques (lot for lot, EOQ, PPB), introduction to MRP-II, ERP and SAP.9001, and Kazien.</li> </ul>	

Sub.	Course Description – توصيف مقرر دراسي	الموضوع	 <b>كليات المعرفة</b> ALMAAREFA COLLEGES
Date		التاريخ	

References	المراجع
<b>Required Textbooks</b> Operations Management, by J. Heizer and B. Render, 11th Ed., Prentice Hall (2014).	