



## **Course Description: Operations Management**

Syrian Arab Republic	 الجامعة الافتراضية السورية SYRIAN VIRTUAL UNIVERSITY	الجمهورية العربية السورية
Ministry of Higher Education		وزارة التعليم العالي
Syrian Virtual University		الجامعة الافتراضية السورية

## Course Description: Operations Management

### 1. Basic Information:

Course Name	Operations Management
Course ID	BQM301
Contact Hours (Registered Sessions)	18
Contact Hours (Synchronized Sessions)	18
Mid Term Exam	
Exam	75 min
Registered Sessions Work Load	18
Synchronized Session Work Load	18
Credit Hours	4

### 2. Pre-Requisites:

Course	ID
Fundamentals of Financial Management	BFB201

### 3. Course General Objectives:

This course provides students with the necessary concepts and tools enabling them to manage production and services operations, and taking into account the important role of information and telecommunication technology in the functions and activities of Operations Management. In this course, students learn how to develop products, services and strategies; in addition to learn methods of planning production capacities, forecasting, demand, and assuring production resources and tools. Layout of the organization plants and the internal layout of facilities are also discussed. Issues related to process and product quality are underlined.

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#### 4. Intended Learning Outcomes (ILO):

Code	Intended Learning Outcomes
ILO1	Enabling students to understand operations management concepts in a context of different challenges facing products and services production.
ILO2	Helping students to assimilate products development tools and phases, and clarify services particularities.
ILO3	Introducing production process and technology, in addition to plant internal layout.
ILO4	Enabling students to assimilate production planning and organization according to production system and demands forecasting.
ILO5	Making sure that students are aware of plant location importance and Plant Selection Criteria.
ILO6	Enabling students to understand total quality control and management, and its tools in operations management.
ILO7	Helping students to assimilate inventory management importance and to acknowledge its management techniques.
ILO8	Introducing Just-In-Time operations achievement and its main tools.
ILO9	Focusing on maintenance management importance and acknowledging its main tools.

#### 5. Course Syllabus (18 hours of total synchronized sessions;18 hours of total Recorded Sessions)

- RS: Recorded Sessions; SS: Synchronized Sessions

ILO	Course Syllabus	RS	SS	Type	Additional Notes
ILO1	Principal concepts in operations management • Operations and	1.5	1.5	<input type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars	Annex:Historical Review In this course,

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	<p>production management.</p> <ul style="list-style-type: none"> <li>● Operations management activities</li> <li>● Operations management challenges and productivity</li> <li>● Production and services industry</li> <li>● Operations strategies</li> <li>● Professional ethics and social responsibilities.</li> </ul>			<input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	theoretical and practical parts are integrated together
<b>ILO2</b>	<p>Products development and design</p> <ul style="list-style-type: none"> <li>● New products planning.</li> <li>● Product life cycle</li> <li>● Product development phases</li> <li>● Technical issues in product development</li> <li>● Service design particularity</li> <li>● Application of decision tools to select the best design</li> </ul>	1.5	1.5	<input type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	In this course, theoretical and practical parts are integrated together.
<b>ILO3</b>	<p>Process design and internal layout</p> <ul style="list-style-type: none"> <li>● Production process</li> </ul>	1.5	1.5	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars	In this course, theoretical and practical parts are

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	design concept <ul style="list-style-type: none"> <li>● Production strategies</li> <li>● Production technologies</li> <li>● Internal layout and its different types</li> </ul>			<input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	integrated together.
<b>ILO4</b>	Production capacities planning <ul style="list-style-type: none"> <li>● What's production planning?</li> <li>● Production systems</li> <li>● production planning in assembly industry</li> <li>● production organization</li> <li>● production general control and its models</li> <li>● production planning and control in continuous &amp; discontinuous production</li> </ul> Material Requirement planning <ul style="list-style-type: none"> <li>● Determination of production batch size</li> <li>● Calculation of requirements MRP</li> <li>● Master Production Management</li> </ul> Demand Forecasting <ul style="list-style-type: none"> <li>● Demand forecasting concepts</li> </ul>	6	6	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	In this course, theoretical and practical parts are integrated together.

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	<ul style="list-style-type: none"> <li>● Time Series</li> <li>● Forecasting Error</li> <li>● Linear Regression models</li> <li>● Auditing and control on forecasting systems</li> </ul>				
<b>ILO5</b>	<p>Location</p> <ul style="list-style-type: none"> <li>● Importance and criteria of location</li> <li>● Globalization effect on location selection</li> <li>● Location selection methods</li> <li>● Role of government policies in location selection.</li> </ul>	1.5	1.5	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Exercises</li> <li><input checked="" type="checkbox"/> Assignments</li> <li><input type="checkbox"/> Seminars</li> <li><input type="checkbox"/> Projects</li> <li><input type="checkbox"/> Practices</li> <li><input type="checkbox"/> Others</li> </ul>	In this course, theoretical and practical parts are integrated together.
<b>ILO6</b>	<p>Quality Control</p> <ul style="list-style-type: none"> <li>● Concepts in quality control and management</li> <li>● Quality costs</li> <li>● International Standardization Organization</li> <li>● Total Quality Management and its tools</li> <li>● Additional issues in quality control</li> </ul>	1.5	1.5	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Exercises</li> <li><input checked="" type="checkbox"/> Assignments</li> <li><input type="checkbox"/> Seminars</li> <li><input type="checkbox"/> Projects</li> <li><input type="checkbox"/> Practices</li> <li><input type="checkbox"/> Others</li> </ul>	In this course, theoretical and practical parts are integrated together.

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<b>ILO7</b>	Inventory Management & Applications <ul style="list-style-type: none"> <li>• General Principles in Inventory Management</li> <li>• ABC method</li> <li>• Principal Systems in Inventory Management</li> <li>• simple Models in Inventory Management</li> </ul>	1.5	1.5	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	In this course, theoretical and practical parts are integrated together.
<b>ILO8</b>	Just In Time <ul style="list-style-type: none"> <li>• Concept of Just In time</li> <li>• Philosophy and objectives of Just In Time.</li> <li>• Cards system KANABN</li> </ul>	1.5	1.5	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	In this course, theoretical and practical parts are integrated together.
<b>ILO9</b>	Maintenance Management <ul style="list-style-type: none"> <li>• Corrective Maintenance</li> <li>• Preventive Maintenance</li> <li>• Personnel Management &amp; incentives theory</li> <li>• Traditional organization of maintenance unity</li> <li>• Spare parts inventory management</li> <li>• Real observation of machines' utilization rate &amp; availability</li> </ul>	1.5	1.5	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	In this course, theoretical and practical parts are integrated together.

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	<ul style="list-style-type: none"> <li>• Optimal organization of corrective maintenance</li> <li>• Selecting the best method of maintenance</li> </ul>				
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## 6. Assessment Criteria (Related to ILOs)

ISC	Interactive Synchronized Collaboration	Ex	Exams	Rpt	Reports
PF2F	Presentations and Face-to-Face Assessments	PW	Practice Work		

ILO Code	ILO	Intended Results	Assessment Type				
			ISC	PW	Ex	PF2F	Rpt
ILO1	Enabling students to understand operations management concepts in a context of different challenges facing products and services production.		X		X		X
ILO2	Helping students to assimilate products development tools and phases, and clarify services particularities		X		X		X
ILO3	Introducing production process and technology, in addition to plant internal layout.		X		X		X
ILO4	Enabling students to assimilate production planning and		X	X	X		X



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	organization according to production system and demands forecasting						
<b>ILO5</b>	Making sure that students are aware of plant location importance and Plant Selection Criteria.		X	X	X		X
<b>ILO6</b>	Enabling students to understand total quality control and management, and its tools in operations management		X		X		X
<b>ILO7</b>	Helping students to assimilate inventory management importance and to acknowledge its management techniques		X	X	X		X
<b>ILO8</b>	Introducing Just-In-Time operations achievement and its main tools		X		X		X
<b>ILO9</b>	Focusing on maintenance management importance and acknowledging its main tools		X		X		X

## 7. Practice Tools:

Tool Name	Description

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## 8. Main References

1. محسن، عبدالكريم؛ النجار، صباح مجيد. (2009). إدارة الإنتاج والعمليات. مكتبة الذاكرة، بغداد، العراق.  
 Heizer, J. & Render, B. (2008). Principles of Operations Management, 7e eds. Pearson, Prentice Hall, U-K.

## 9. Additional References

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