Course Syllabus

1. <u>Department Name:</u>	Business Management					
2. <u>Program Name</u> :	Master of Quality Management					
3. <u>Program Code</u>						
4. Course Code and Title:	1601782, Supply Chain Management					
5. Course credits:	3					
6. <u>Pre-requisites</u> :	-					
7. Course Instructor/ Coordinator	Dr. Ayman Abdallah					
Name and Email	a.abdallah@ju.edu.jo					
8. Course web-page:						
9. Academic year:	2016/2017					
10. Semester:	First x Second 1 st Summer 2 nd Summer					

11. Textbook(s)

Simchi-Levi, Kaminsky, and Simchi-Levi, "Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies, 3rd ed., 2008, McGraw-Hill.

12. References:

- 1- Jespersen, Skjott-Larssen, "Supply Chain Management: Theory and Practice", 2005, Copenhagen Business School Press
- 2- Chopra, Meindl, "Supply Chain Management: Strategy, Planning and Operation", 2008, Prentice Hall

13. Other resources used:

Make good use of library resources such as journals and research papers in addition to internet resources.

14. Course description

The course introduces the concept of Supply Chains (SC), and explores the key issues associated with the design and management of industrial supply chains. The course will therefore consider the efficient integration of suppliers, manufacturers, warehouses and stores to maximize the speed and quality of product delivery, flexibility, and service levels.

15. Course Intended Learning Outcomes:

PILOs

- a) Apply critical, analytical, and systems thinking skills
- b) Apply quantitative and qualitative skills related to operations management, project management, and supply chain management.
- c) Apply quality management systems standards and statistical quality tools to diagnose and amend mistakes
- d) Apply scientific research and statistical analysis skills
- e) Utilize strategic planning and analysis skills and optimal utilization of human resources skills through human resource management and organizational behavior

		Mapping to PILOs						
CILOs	а	b	С	d	е			
(Preferred not to exceed 12 CILOs)								
1. Define the supply chain	х	х						

	. 1								
	management and								
	analyze the factors								
	making it difficult.								
2.	Employ the inventory	х	х	х	х				
	models of economic								
	order quantity,								
	economic production								
	quantity, and quantity								
	discounts.								
3.	Analyze supply	х	х						
	contracts for make-to-								
	order SC, make-to-stock								
	SC, and for non-								
	strategic components.								
4.	Discuss the bullwhip	х	х			х			
	effect and Interpret the								
	factors leading to it as								
	well as the methods of								
	coping with it.								
5.	Compare push-based,	Х	Х						
	pull-based, and push-								
	pull based supply								
	chains, and Infer the								
	appropriate SC strategy								
	for different cases.								
6.	Compare between direct	х	х	Х					
	shipment distribution								
	strategies and								
	intermediate inventory								
	storage point strategies								
	and conclude the								
	appropriate strategy								
	under different								
	circumstances.								
7.	Discuss third-party	х	х						
	logistics, retailer-								
	supplier partnerships,								
	and distribution								
	integration, and explain								
1	how they enhance								
	strategic alliances.								
8.	Discuss outsourcing	х	х			Х			
	buy/make decisions and								
	procurement strategies.								
9.	Develop a product	х	х	х		Х			
	structure, a gross								
	requirements plan, and a								
	net requirements plan.								
10.	Analyze international	х	х						
	SCM and the associated								
	risk management								
	policies.								

16. Course evaluation: (Formative and summative assessment methods are expected)					
Assessment Type	Details/ Explanation of Assessment in relation to CILOs	Number	Weight	Date(s)	
Quizzes					
Midterms	1 +2 +3 +4	1	30 %	23/03/2017	
Assignments					
Projects/Case Studies	1 +3 +4 +5 +6 +7 +8 +10	1	30%	To be submitted before 27/4/2017	
Final	All CILOs are included	1	40%	11/05/2017	
Total			100%		

17. <u>Description of Topics Co</u>	vered (The description should be from the textbook used)
Topic Title	Description
(e.g. chapter title)	
Chapter 1. Introduction to supply chain management	This chapter includes defining SCM, discussing the development chain and its effect on the existing SC, the role of global optimization in making SCM difficult, uncertainty and risk in SCM, evolution of SCM, complexity of SCM, and key Issues in SCM.
Chapter 2. Inventory Management	This chapter includes explaining and using the EOQ model for independent inventory demand, computing reorder point and safety stock, applying the production order quantity model, explaining and use the quantity discount model.
Chapter 4. Supply contracts	This chapter includes supply contracts for strategic components including contracts for make-to-stock supply chain, contracts for make-to-order supply chain, contracts with asymmetric information. It also includes contracts for nonstrategic components.
Chapter 5. The value of information	This chapter includes the bullwhip effect, information sharing & incentives, information and supply chain trade-offs, centralized and decentralized decision making and performance impacts, information for the coordination of systems, lead-time reduction, information and supply chain trade-offs.
Chapter 6. Supply chain integration	This chapter discusses push, pull, push-pull supply chains, the impact of lead time and demand uncertainty on selecting the appropriate SC strategy, and the impact of internet on SC strategies.
Chapter 7. Distribution strategies	This chapter includes direct shipment distribution strategies, intermediate inventory storage point strategies, including traditional warehousing, cross-docking, inventory pooling, transshipment, and discusses ways to select the appropriate strategy.
Chapter 8. Strategic alliances	This chapter includes the discussion of a framework for strategic alliances, third party logistics including advantages and disadvantages of 3PL, 3PL issues and requirements and implementation issues, retailer-supplier partnership including types and requirements of RSP, and distribution

	integration including types and issues of DI.
Chapter 9. Procurement and	This chapter includes outsourcing benefits and risks, framework for buy/make
outsourcing strategies	decisions, procurement strategies, and e-procurement.
Distributed material.	This chapter discusses dependent demand, master production schedule, bills of
Material requirement	materials, MRP structure, gross material requirements plan, and net material
planning	requirements plan.
Chapter 10. Global Logistics	This chapter discusses international supply chain management, forces toward
and Risk Management	globalization, global risks, and mapping global risks.

18. Cours	e Weekly Br	eakdown:			
Week	Date	Topics covered	CILOs	Teaching Method	Assessment
1	2/2/2017	Ch. 1: Defining SCM, discussing the development chain and its effect on the existing SC, the role of global optimization in making SCM difficult, uncertainty and risk in SCM, evolution of SCM, complexity of SCM, and key Issues in SCM.	1	-Lecturing -Discussion	-Follow up questions
2	9/2/2017	Ch. 2: The EOQ model for independent inventory demand, reorder point and safety stock, applying the production order quantity model. explaining and use the quantity discount model, the quantity discount model.	2	-Lecturing -Discussion -Problem solving exercises	-Follow up questions
3	16/2/2017	Ch. 2: Production order quantity model (additional examples). explaining and use the quantity discount model, the quantity discount model.	2	-Lecturing -Discussion -Problem solving exercises	-Follow up questions -
4	23/2/2017	Ch. 4: Supply contracts for strategic components including contracts for make-to-stock supply chain. Supply contracts for non strategic components.	3	-Lecturing -Discussion	-Follow up questions
5	2/3/2017	Ch. 5: The bullwhip effect, factors that contribute to the bullwhip effect, and strategies for coping with the bullwhip effect. Information sharing & incentives, information and supply chain trade-offs including the lot-size-inventory trade-off, inventory-transportation cost trade-off, lead time-transportation trade-off, product variety-inventory trade-off, and cost-customer service trade-off.	4	-Lecturing -Discussion -Case study	-Case study discussion

6	9/3/2017	Ch. 6: Push, pull, push-pull	5	-Lecturing	-Follow up
	7/3/2017	supply chains. The impact of lead	,	-Discussion	questions
		time and demand uncertainty on		-case study	-case study
		selecting the appropriate SC			discussion
		strategy, and the impact of internet on SC strategies.			
7	16/3/2017	Ch. 7: Direct shipment	6	-Lecturing	-Follow up
		distribution strategies,		-Discussion	questions
		intermediate inventory storage			
		point strategies, including traditional warehousing, cross-			
		docking strategy, inventory			
		pooling, and transshipment, issues			
		in to selecting the appropriate			
		strategy.			
8	23/3/2017	Midterm exam	1 +2 +3 4		
	20/0/5317				77.11
9	30/3/2017	Ch. 8: Framework for strategic alliances, third party logistics	7	-Lecturing -Discussion	-Follow up questions
		including advantages and		-Discussion	questions
		disadvantages of 3PL. 3PL issues			
		and requirements and			
		implementation issues, retailer- supplier partnership including			
		types and requirements of RSP,			
		and distribution integration			
		including types and issues of DI.			
10	6/4/2017	Ch. 9: Outsourcing, outsourcing	8	-Lecturing	-Follow up
		benefits and risks. Framework for		-Discussion	questions
		buy/make decisions, procurement strategies, and e-procurement.			
		strategies, and e-procurement.			
11	13/4/2017	Distributed material: Material	9	-Lecturing	-Follow up
		requirements planning:		-Discussion	questions
		dependent demand, master production schedule, bills of		-Problem solving	
		materials, MRP structure, gross			
		material requirements plan, and			
12	20/4/2017	net material requirements plan. Ch. 10: Global logistics and risk	10	Lacturina	-Follow up
12	20/4/2017	management: international supply	10	-Lecturing -Discussion	questions
		chain management, forces toward			1
		globalization, global risks, and			
13	27/4/2017	mapping global risks. Project presentations and	All	-Presentation by	-Project
13	277 17 2017	discussion		project members	quality
					-Project
1.4	4/5/2017	Project procentations 1	A 11	Dragantation 1-	contribution
14	4/5/2017	Project presentations and discussion	All	-Presentation by project members	-Project quality
				project memoers	-Project

				contribution
15	11/5/2017 Final exam	Final exam	All	

19. <u>Others:</u>	
	Description
Attendance policies:	Students are not allowed to miss more than 15% of the classes during the semester. Failing to meet this requirement will be dealt with according to the university disciplinary rules.
Absences from exams and handing in assignments on time:	Assignments should be submitted on time. Make up exams will be held for those students having permission from the deputy dean for students' affairs.
Health and safety procedures:	
Honesty policy regarding cheating, plagiarism, misbehavior:	Cheating and plagiarism will be dealt with according to the university disciplinary rules.

Course Coordinator:	Dr. Ayman Abdallah	
Head of Department:	Dr. Taghrid Suifan	
Head of curriculum committee/ School		
Level:		
Dean:		
Approved by the Program Coordinator/		
Head of the Department on:		

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