



UNIVERSIDAD
esan

Syllabus

Supply Chain Management

Aug - Dec 2018

Term VII

Lecturers

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I. General data about the course

Title	: Supply Chain Management	Code	: 01239
Requisite	: Investigación operativa II	Semester	: 2018 - II
Credits	: 3	Term	: VII
Hours	: 4 (2 hours of theory, 2 hours of practice)		

II. Summary

This course covers theoretical and practical topics. It seeks to develop competencies in the analysis of key elements associated with the design and administration of supply chains, considering the efficient integration of suppliers, manufacturers, warehouses and distributors.

The course focuses on the criteria and tools that students can utilize to manage costs while analyzing the relationship between logistics and marketing, logistics and the supply chains, and the implementation of supply chain replenishment. It seeks to monitor the customer's management and the creation of value, the integration of order processes with the logistic system of the company and inventory management, warehousing system, packing, outsourcing and multimodal services, global logistics; control of logistic processes and the impact of logistics on the company's profitability.

III. Course Objectives

To generate models and strategies for effective integration of the supply chain network in order to improve the competitiveness of the company.

IV. Learning Outcomes

Competence:

At the end of the course, the students will be able to:

- Classify the stages drivers and roles of supply chains and their part in improving supply chain network performance.
- Evaluate strategies to balance responsiveness and efficiency under different conditions of supply and demand uncertainty.
- Define and contrast the concepts of Green Supply Chain Management and its benefits for the organization and the needs of society.
- Demonstrate a basic level of application of the SAP ERP software in a range of supply chain contexts.
- Apply and calculate different demand planning techniques, manufacturing strategies and inventory control systems in the context of the supply chain.
- Evaluate sourcing decisions in terms of the benefits and risks.
- Summarize and interpret the logistics functions to improve supply chain performance.

V. Methodology

During the development of the course, sessions will contain student presentations and discussion in multidisciplinary teams. The topics will be about theoretical aspects learned in class, where students are encouraged to use their knowledge and creativity to answer questions and solve problems with the lecturer's guidance.

Theoretical lectures will provide students with essential background knowledge that will be reinforced with visual tools (videos) about relevant topics of supply chains.

Major assignments (two case studies and two team projects) in this class will be completed in teams of three to five students that **mandatorily will work in multidisciplinary teams** in order to recreate real business-like situations.

VI. Evaluation and Grading

The evaluation system is comprehensive and continuous; it is subdivided as follows: Permanent evaluation (50%), mid-term exam (25%) and final exam (25%).

The permanent evaluation is broken down into the following:

PERMANENT EVALUATION (PEP) 50 %		
Type of evaluation	Description	Weight
Quizzes	Two quizzes (Neither one is cancelled)	30%
Case Studies	Two case studies	30%
SAP modules	Completion of scheduled modules	5%
Course Projects	Project #1 Report	10%
	Project #1 Presentation	5%
	Project # 2Report	15%
	Project # 2 Presentation	5%

The final grade will be determined based on the following formula:

$$FG = (0,25 \times ME) + (0,50 \times PE) + (0,25 \times FE)$$

Where:

FG = Final Grade

ME = Midterm Exam

PE = Permanent Evaluation

FE = Final Exam

VII. Detailed Program

WEEK	Contents	Activities / Evaluation
Learning Unit 1: Learning Objectives: <ul style="list-style-type: none"> Classify the stages and drivers of supply chains and their role in improving supply chain network performance. Evaluate strategies to balance responsiveness and efficiency under different conditions of supply and demand uncertainty. 		
1° Aug 20 th – 25 th	Class logistics, Team assignments, case studies and grading Supply Chain Basics & Understanding the Supply Chain. Supply Chain Drivers and Metrics.	Class Discussion and participation Readings: Chopra Ch 1 & Ch 3 Wisner Ch 1
2° Aug 27 nd – Sep 1 st	Supply Chain Performance: Achieving Strategic Fit and Scope.	Class Discussion and participation Reading: Chopra Ch 2
3° Sep 3 rd – 8 th	Coordination in the Supply Chain	Class Discussion and participation Case study # 1 Reading: Chopra Ch 10
Learning Unit 2: Learning Objectives: <ul style="list-style-type: none"> Define and contrast the concepts of Green Supply Chain Management and its benefits for the organization and the needs of society. Apply and calculate different demand planning techniques, manufacturing strategies and inventory control systems in the context of the supply chain. Demonstrate a basic level of application of the SAP ERP software in a range of supply chain contexts. 		
4° Sep 10 th – 15 th	Green Supply Chain: Basic concepts, Management. Benefits and improvements of Green Supply Chain Management, the need for Green Supply Chain.	Class Discussion and participation Reading: Chopra Ch18 Quiz #1 Group Project # 1
5° Sep 17 th – 22 nd	Demand Forecasting Supply Chain Laboratory: SAP Introduction to Navigation. (2 hours)	Class Discussion and participation Reading: Wisner Ch 5
6° Sep 24 th – 29 th	Aggregate Planning in the Supply Chain. Supply Chain Laboratory SAP Production Planning and Execution (PP) (First Part: Forecasting) (2 hours)	Class Discussion and participation Reading: Wisner Ch 6 Case Study #1 due
7° Oct 1 st – 6 th	Aggregate Planning in the Supply Chain – Continued. Student Group Project #1 Presentations	Class Discussion and participation Group Project # 1 Report Due

<p>8° Oct 8th – 13th</p>	<p>MIDTERM EXAM</p>	
<p>Learning Unit 3: Learning Objectives:</p> <ul style="list-style-type: none"> • Evaluate sourcing decisions in terms of the benefits and risks. • Apply and calculate different demand planning techniques, manufacturing strategies and inventory control systems in the context of the supply chain. 		
<p>9° Oct 15th – 20th</p>	<p>Materials management in the Supply Chain (MPS-MRP) Supply Chain Laboratory SAP: Production Planning and Execution (PP) (Second Part: MPS (Master Production Schedule) running with MRP (Material Requirements Planning) (2 hours).</p>	<p>Class Discussion and participation Group Project # 2 Reading: Wisner Ch 6</p>
<p>10° Oct 22nd – 27th</p>	<p>Sourcing Decisions in the Supply Chain.</p>	<p>Class Discussion and participation Case study # 2 Reading: Chopra Ch 15 & Wisner Ch 3</p>
<p>Learning Unit 4: Learning Objectives:</p> <ul style="list-style-type: none"> • Summarize and interpret the logistics functions to improve supply chain performance. • Demonstrate a basic level of application of the SAP ERP software in a range of supply chain contexts. • Apply and calculate different demand planning techniques, manufacturing strategies and inventory control systems in the context of the supply chain. 		
<p>11° Oct 29th – Nov 3rd</p>	<p>Logistics: Inventory Management (Theory and Practice)</p>	<p>Class Discussion and participation Reading: Wisner Ch 7</p>
<p>12° Nov 5th – 10th</p>	<p>Logistics: Inventory Management (Theory and Practice) Supply Chain Laboratory SAP: Procurement and inventory (2 hours)</p>	<p>Class Discussion and participation Quiz # 2 Reading: Wisner Ch 7</p>
<p>13° Nov 12th – 17th</p>	<p>Logistics: Inventory Management (Theory and Practice) Logistics: Warehousing / Logistics Facilities</p>	<p>Class Discussion and participation Case Study #2 due Reading: Wisner Ch 7 & 9</p>
<p>14° Nov 19th – 24th</p>	<p>Student Group Project # 2 Presentations Logistics: Transportation in the Supply Chain</p>	<p>Class Discussion and participation Group Project # 2 Report Due Reading: Wisner Ch 9</p>
<p>15° Nov 26th – Dec 1st</p>	<p>Logistics: Transportation in the Supply Chain Course Review</p>	<p>Class Discussion and participation Reading: Wisner Ch 9</p>
<p>16° Dec 3rd – 8th</p>	<p>FINAL EXAM</p>	

VIII. Bibliography

Mandatory Bibliographies (Selected Chapters)

Chopra, S. & Meindl, P. (2010) **Supply Chain Management: Strategy, Planning and Operation**. (4th Edition) New Jersey, Pearson Prentice-Hall, Inc. [HF5415.13 C533i 2010]

Wisner, JD., Tan, K-C., Leong, GK. (2012) **Principles of Supply Chain Management**, (3rd Edition), Mason, OH: South-Western - Cengage Learning

Additional Bibliography

C. Scott et al., (2011) **Chapter 6, Guide to Return in Supply Chain Management**. In *Guide to Supply Chain Management*. Berlin Heidelberg: Springer-Verlag. DOI 10.1007/978-3-642-17676-0_6

Blanchard, D. (201) **Chapter 16 Green Supply Chains: It's Not Easy Going Green**. In *Supply Chain Management Best Practices*. Hoboken, NJ: Wiley. DOI: 10.1002/9781119202912.ch16

PLEASE NOTE: Internet searches will often take you to non-academic information resources such as Wikipedia.com, Ask.com, Encarta.msn.com, Infoplease.com, etc. You may supplement your research with these sources, but keep in mind that the information you find there may not be accurate, since it does not come under a formal oversight or peer-review process.

While you may use and cite non-academic resources such as Wikipedia when working on assignments, you may not rely on them exclusively. The majority of your sources should be peer-reviewed academic journals. Further, remember that you are responsible for the accuracy of any facts you present in your assignments and therefore should confirm the veracity of information you find on non-academic sources through further research.

IX. Lecturers

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