**Course Syllabus**

**Professor Mohamed Kamal El-Din Hasan**

**ISOM 316 – Logistics & Supply Chain Management – Spring 2022-2023**

**Lecture Time:** Sun, Tue, Thu 1:00 PM – 1:50 PM

**Lecture Location:** BUA-S First Floor, C1, Room 1020

**Contact Information:**

**Location** :ISOM Department – 2nd Floor – Office No. A-2-1015

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**Office Hours** : Sun, Tue, Thu 2:00 PM – 3:00 PM.

**Course Description:**

This course focuses on the development and application of decision models in supply chains with emphasis on demand forecasting, aggregate planning, inventory management (cycle and safety), supply network design, transportation, coordination and sourcing. Spreadsheet based tools and techniques will extensively be utilized in building various decision models for effective decision making in supply chains.

**Course Learning Outcomes:**

The learning outcomes for this course, listed below, relate to the learning goals of the College of Business Administration Undergraduate Program, which can be found in the appendix at the end of this syllabus.

Upon successful completion of the course, students will be able to:

* **To provide a strategic framework that can be used to analyze design, planning, and operational decisions in a supply chain**

1. Introduces the definition of a supply chain and what it involves
2. Sets the strategic framework that establishes a link between customer needs and supply chain capabilities through the implied demand and responsiveness spectrum
3. discusses the logistical and cross-functional drivers of supply chain performance namely inventory, transportation, facilities, information, sourcing, and pricing

* **Discuss issues to be considered when designing a supply chain network**

1. brings to the surface all issues that a firm must consider when designing their supply chain network
2. focuses the discussion on network design and first aims to build a strategic framework for facility decisions and then discuss methodologies for network design

* **To stress the importance of planning in a supply chain and provide basic tools that can be used when planning demand and supply**

1. discussion needs to begin with the importance of aggregate planning decisions in supply chains
2. focuses on responding to predictable variability in a supply chain by managing supply and demand

* **To provide an understanding of why inventory builds up in a supply chain and an identification of managerial levers that improve supply chain performance and profitability while lowering inventories**

1. discussion needs to start with the role of cycle inventory in the supply chain

**Required Material:**

**Textbook**: Chopra, S., and Meindl, P. Supply *Chain Management: Strategy, Planning, and Operation*,

6th Ed., Global Edition, Pearson Education Limited 2016.

**Course Requirements and Policies:**

**Group Assignments:** There are a total of 2 Group assignments. These Group assignments need to be submitted on the due days.

**In-Class Quizzes:** There are a total of 6 in-class Quizzes. Each Quiz will be scheduled after finishing the corresponding chapter.

**Attendance and Participation:** Every student in this course must abide by the Kuwait University Policy on Attendance (published in the Student Guide, Chapter 3, Section 13). A copy of the student guide can be accessed online on: <http://www.kuniv.edu/cs/groups/ku/documents/ku_content/kuw055940.pdf>

This course has a significant seminar component and class participation is critical to the learning experience.

**Group Project:** Students are required to participate in a group project. Groups will be assigned during the first week of class. The intention of the group project is to allow students to apply (or expand on) the ideas they have learned in class and where they find themselves most interested in regarding service operations management. Groups will consist of 4 students only; and exceptions must be approved in advance. Each group will choice any one of the following industries to study its supply chain:

1. Oil Industry
2. Petrochemical Industry
3. Trucking Industry
4. Perishable Food Industry
5. Retailing Industry
6. Airline Industry

The project will account for 15% of the overall grade. ***The project is due in the last class***

***Another important deadline is April 5, 2023, when I expect a one page proposal from each group about their project. Each team will present their proposal to the class (no more than 5-10 minutes)***. My objective at this stage is to make sure that the appropriate elements of your project will be properly analyzed, and that you are “biting enough, but not too much”.

Groups will present their projects during the last class. Your PowerPoint slides (with additional notes & appendix, if necessary) are sufficient for your report hand-in. Each group will have (and should use) 30 minutes to make their presentation (leaving time for questions/ comments from the audience).

The expected outline for the project presentations & reports are discussed below:

The project report should not be a detailed description of everything you have done but a specific set of observations and recommendations. It should begin with an executive summary no longer than 250 words. All details are to be put in an appendix in the form of exhibits, tables etc. The general guidelines for the project are as follows:

1. Executive summary
2. Define the process and the context (business unit) in which it operates.
3. What is the strategy / market of the business unit?
4. What does this imply in terms of the supply chain you are studying? What must this process be able to do particularly well in terms of cost, time, quality, and flexibility? The headings mentioned here are broad. You are expected to identify specific dimensions along which the process is expected to do particularly well.
5. Describe the current process structure in terms of what we have seen in class, e.g., information, inventory, transportation, location, etc...
6. Discuss the process capabilities, given the current structure, in terms of the specific dimensions identified by you in 4.
7. Discuss existing problems and weaknesses in the current process. What additional capabilities does the process need to develop?
8. How should the process be restructured to develop these capabilities? Discuss why the changes suggested by you will have the desired effect along the key dimensions identified by you.
9. Discuss how the suggested changes should be implemented with a time line. Explain any resistance you may face in implementing the changes.

Please note that these are general guidelines. I am not looking for a project report where you have one slide per points in the sequence listed above. I have listed the points that I feel are important in most reports. Please feel free to add to or alter the above list as best fits your project.

**Cheating and Plagiarism:** Every student in this course must abide by the Kuwait University Policy on Cheating and Plagiarism (published in the Student Guide, Chapter 3, Section 2). A copy of the student guide can be accessed online on:

<http://www.kuniv.edu/cs/groups/ku/documents/ku_content/kuw055940.pdf>

Please carefully note all sources and assistance when you turn in your work. Under no circumstances should you take credit for work that is not yours. You should neither receive nor give any unauthorized assistance on any deliverable. If you have any questions about what constitutes “unauthorized assistance” please email me before the deliverable is submitted.

**Writing Style:** Students must refer to MLA (Modern Language Association format is used for humanities and literature works) writing style for their assignments and report writing. Refer to the English Language Center for help.

**Grading:**

The scores in this course will be the weighted average of the following items:

|  |  |
| --- | --- |
| **Weight** | **Description** |
| 20% | Midterm Exam |
| 15% | In-Class Quizzes |
| 10% | Group Assignments |
| 15% | Group Project |
| 40% | Final Exam |
| 100% | TOTAL |

**Grade Distribution:**

|  |  |
| --- | --- |
| **Grade** | **Range** |
| A | ≥ 95 |
| A- | ≥ 90 and < 95 |
| B+ | ≥ 87 and < 90 |
| B | ≥ 83 and < 87 |
| B- | ≥ 80 and < 83 |
| C+ | ≥ 77 and < 80 |
| C | ≥ 73 and < 77 |
| C- | ≥ 70 and < 73 |
| D+ | ≥ 65 and < 70 |
| D | ≥ 60 and < 65 |
| F | < 60 |

**Course Outline:**

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| --- |
| **[Chapter 1](http://myphlip.pearsoncmg.com/faculty/mpchapter.cfm?vbcid=7653)**[: Understanding the Supply Chain](http://myphlip.pearsoncmg.com/faculty/mpchapter.cfm?vbcid=7653) |
| **[Chapter 2](http://myphlip.pearsoncmg.com/faculty/mpchapter.cfm?vbcid=7654)**[: Supply Chain Performance: Achieving Strategic Fit and Scope](http://myphlip.pearsoncmg.com/faculty/mpchapter.cfm?vbcid=7654) |
| **[Chapter 3](http://myphlip.pearsoncmg.com/faculty/mpchapter.cfm?vbcid=7655)**[: Supply Chain Drivers and Metrics](http://myphlip.pearsoncmg.com/faculty/mpchapter.cfm?vbcid=7655) |
| **Chapter 4**: Designing Distribution Networks and Applications to Online Sales |
| **[Chapter 5](http://myphlip.pearsoncmg.com/faculty/mpchapter.cfm?vbcid=7657)**[: Network Design in the Supply Chain](http://myphlip.pearsoncmg.com/faculty/mpchapter.cfm?vbcid=7657) |
| **[Chapter 8](http://myphlip.pearsoncmg.com/faculty/mpchapter.cfm?vbcid=7660)**[: Aggregate Planning in the Supply Chain](http://myphlip.pearsoncmg.com/faculty/mpchapter.cfm?vbcid=7660) |
| **[Chapter 9](http://myphlip.pearsoncmg.com/faculty/mpchapter.cfm?vbcid=7661)**[: Sales and Operations Planning: Planning Supply and Demand in a Supply Chain](http://myphlip.pearsoncmg.com/faculty/mpchapter.cfm?vbcid=7661) |

**Important Dates**

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| --- | --- |
| **Date** | **Event** |
| March 16, 2023 | Last day to drop a course |
| May 5, 2023 | Last day of classes |
| May 14, 2023 11:00 AM – 1:00 PM | Final Exam |