

IEMS 486 – Logistics Management

Tentative Course Description and Outline

Spring, 2006

COURSE DESCRIPTION:

Supply chain management has become increasingly important in recent years and critical for achieving a competitive advantage. The course will cover state-of-the-art strategies for logistics and supply chain management and the quantitative models that support them. Emphasis will be given to recent real world examples and applications as well as the development of modeling skills. Extensive use will be made of EXCEL as a modeling environment.

READING:

The textbook for this class is

Chopra, S. and P. Meindl, *Supply Chain Management: Strategy, Planning, and Operation*, Prentice Hall, second edition, 2004.

Friedman, T. L., *The World is Flat: A Brief History of the Twenty-First Century*, Farrar, Straus and Giroux, 2005.

INSTRUCTOR:

Professor Mark S. Daskin

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Office hours: Monday, 4:15-6:00 p.m.

If these hours are not convenient, please feel free to contact me and we will arrange a meeting at another time. Alternatively, you may communicate your questions to me by e-mail, and I will respond as soon as I can.

COURSE EVALUATION:

60% - homework

20% - class participation and discussion

20% - final exam

The course topic and schedule is as follows (subject to changes):

Week Date	Topics	Book Chapter/Reading Material
1 Mar 27	Introduction to supply chain management Review of EXCEL modeling and optimization in EXCEL	Chapters 1, 2, 3
2 Apr 3	Aggregate planning	Chapter 5, 6
3 Apr 10	Basic inventory management	Chapter 7
4 Apr 17	Inventory management under uncertainty and multi-echelon inventory management	Chapter 8, 9
5 Apr 24	Distribution strategies and vehicle routing algorithms	Chapter 10
6 May 1	NO CLASS	
7 May 8	Facility location and network design	Chapter 11, Handout on location models
8 May 15	Integrated location/inventory modeling	Handout on location/inventory models
9 May 22	Reliability in supply chain design	Handouts
10 May 29	MEMORIAL DAY NO CLASS	
10 Mar 30	Auctions and the impact of the Internet on supply chain design AND The World is Flat <i>Suggested makeup day for May 29</i>	Chapter 12 and handouts and The World is Flat <i>This is a TUESDAY</i>
11 Jun 5	FINAL EXAM	

HOMEWORK

There will be one homework assigned each Monday, due the following Monday. There will be **NO CREDIT** given for late homework. Most (if not all) homework assignments will involve some computer work, probably using EXCEL, though other programs may also be used. Homework is to be handed in in **hard-copy format**, though you may post a spreadsheet (or other electronic supplement) on Blackboard as a backup for the written assignment. Be sure to let me know that you have done so if you want me to look at the electronic material you have posted.

WEEKS OF MAY 1 AND MAY 29

There will be no class on May 1 as I have to be out of town. Unfortunately, we are also going to miss an additional class on May 29 for Memorial Day. **I suggest that we schedule a makeup for this class on May 30, the following day.**

FINAL EXAM

The final exam is scheduled for week 11, June 5. This will almost certainly involve some use of the computer as well as a more standard written component of the exam.

The final is an open book exam. However, I strongly encourage you to prepare a **one page** summary sheet of information to bring to the final. This is a great study aid and also will enable you to find material quickly.

AVAILABILITY OF EXCEL

EXCEL is available in the IE/MS Computing Lab in Tech C135.

In addition, students are strongly encouraged to download the Trial version of What's Best from the Lindo website (www.lindo.com).

ACADEMIC HONESTY

I have no problem with you working with others on the homework assignments. However, each student must hand in his/her own solutions to each assignment. The electronic components should also be done by each individual. In other words, it is not acceptable to simply copy someone else's spreadsheet, make a few cosmetic changes and then submit the work as your own.

If you do work with someone else on a problem set, please identify the person you worked with on your solutions.

The final is *clearly* to be done without consultation with any other student.

ATTENDANCE POLICY

Each class represents about 10% of the instructional time. Therefore, missing a class means missing a very significant portion of the class material. If you cannot be in class for some reason, please make every effort to let me know in advance that you will not be there (ideally by e-mail). This is particularly important since this is such a small class.

NU DISABILITY POLICY

(For further information, please check the following web site:

<http://www.northwestern.edu/disability/index.html>)

Northwestern University is proud to welcome and support a diverse student body. By removing some of the barriers to education that students with disabilities often experience, we hope to create a learning environment that encourages and challenges all students.

Northwestern University provides a variety of services to assist students with disabilities in becoming active members of the University community. Services vary according to the type and level of impairment experienced by each student. The majority of these services are coordinated by the Office of Services for Students with Disabilities (SSD).

Appropriate services and accommodations are determined on a case-by-case basis. Students with questions about eligibility for services are encouraged to contact SSD. Depending on students' needs and limitations, documentation, history of accommodations and educational environment, SSD may provide the following as appropriate: scribe and reader services; note-taking services; materials in e-text and audio format; testing accommodations, such as extended time and alternative test environment; interpreter and captioning services; assistance in activity relocation; assistance in obtaining elevator and lift keys; access to adaptive equipment and software.