Department of Industrial and Systems Engineering
IE 4543/6543 – Spring 2009
SYLLABUS

Course Title : Logistics Engineering
Class Meetings : T R 11:00 a.m. – 12:15 p.m.
Classroom : McCain 175

Instructor : Prentice McKibben
Office : McCain 260E
Phone : (662) 325-7217
E-mail : prentice@ise.msstate.edu
Office Hours : M T W R F 8:30 – 10:00 a.m.

Text: *Supply Chain Management: Strategy, Planning, and Operation*, Sunil Chopra and Peter Meindl, Third Edition, Prentice Hall, 2007.

Prerequisite: IE 4613 and senior or graduate standing
Co-requisite: IE 4733 (Linear Programming)

Catalog Description: Analysis of complex logistics networks. Integration of supply, production, inventory, transportation and distribution. Strategies for reducing logistics costs and lead times. Customer-supplier partnerships.

Course Objectives and Outcomes:
This is the basic course in logistics engineering and supply chain management. The goal is to give the students an overall introduction on various engineering and management issues dealing with supply chain operations of a manufacturing or service company. Specifically, the course will:

- Introduce issues involved in the relatively new and growing area of supply chain management.
- Provide solution techniques to some of these problems
- Develop an understanding of the tradeoffs inherent in supply chain management and a facility with quantitative analysis tools required to address these tradeoffs.
- Develop familiarity with the techniques currently used throughout industry in addressing the many complex supply chain problems.

Expectation from students:

- Show up for each class on time
- Finish assignments on time
- Read ahead and prepare to discuss the material in class

- Participation in class discussions

Tests: All tests are closed book and closed notes. You are allowed to bring a formula sheet and a calculator only. No make-up tests will be given.

Assignments: Students are expected to have basic computer skills and some linear programming skills. Assignments will be given and collected for homework. Some homework assignments will require the use of a software package (primarily MS Excel).

Grading: An overall course grade will be assigned based on performance using the following:

Course Requirement	***Points Available***
Tests (3 - 4 @ 100 pts ea)	300-400
Home work, Pop Quizzes	50-100
Final Examination (Comprehensive)	150
Class Participation (Instructor's judgement)	0-20

Letter grades will be assigned using the following scale:

Letter Grade	Points Accumulated
A	90% of available pts
B	80-89%
C	70-79%
D	60-69%
F	59% or less

Tentative Course Outline:

CH 1 Understanding the supply chain
CH 2 Supply chain performance achieving strategic fit and scope
CH 3 Supply chain drivers and metrics
CH 4 Designing distribution networks and applications to e-Business
CH 5 Network design in the supply chain
CH 6 Network design in an uncertain environment
CH 8 Aggregate planning in a supply chain
CH 9 Planning supply and demand in a supply chain: managing predictable variability
CH 11 Managing uncertainty in a supply chain: safety inventory
CH 12 Determining the optional level of product availability