

EM 602- MANAGEMENT SCIENCE

Dr. Layek Malek

Fall 2013

TEXT (Recommended, most homework assignment is according to the 9th Edition): Taha, H., Operations Research: An Introduction, 9th Edition, Prentice Hall, 2011

Office Hours: Monday & Thursday 4:30 – 5:30 or by appointment

Office: Mech. 330

Telephone: 973-596-3648

*Lectures

SUBJECT

- 1 Introduction to Management Science
- 2 Linear Programming; Problem formulation
- 3 The Simplex Method, and the big M Method
- 4 Duality and sensitivity analysis
- 5 The transportation and assignment problems
- 6 Shortest Path Algorithms
- 7 Dynamic Programming
- 8 Deterministic Inventory Models
- 9 Deterministic Inventory Models (continued)
- 10 Stochastic Inventory Models
- 11 Queuing Theory, Introduction
- 12 M/M/1/ ∞ Systems and M/M/C/K Systems
- 13 Management Science in perspective

***Approximate (The equivalent of two classes is for tests)**

Grading:

Midterm 33%

Final 33%

Class work 34%