

Spring 2021

EM 602-102: Management Science

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EM 602, Management Science

Dr. Layek Malek

Spring 2021

Recommended TEXT: Taha, H., Operations Research: An Introduction, 10th^h Edition, Prentice Hall, 2016

Office Hours: Monday 4:30 – 5:30 and by appointment

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*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%

Mid Term and Final may be replaced by quizzes