

Fall 2019

EM 602-101: Management Science

Layek Malek

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COURSE OUTLINE
EM 602, Management Science

Dr. Layek Malek

Fall 2019

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

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

Office: Mech. 302

Telephone: 973-596-3648, e mail: malek@njit.edu

***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%

