<center>**COURSE OUTLINE**

EM 602- MANAGEMENT SCIENCE</center>

Dr. Layek Malek   **Fall 2023**

Recommended TEXT: Taha, H., Operations Research: An Introduction, 11th Edition, Prentice Hall, 2023

Office Hours: Monday and Tuesday 4:30 – 5:30 or by appointment
Office: Mech. 330
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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 test)

Grading

        Mid Term 33%
      Final Exam 33%
      Class work 34%