

Operations Research (OR)

Prepared by Dr. Mohamed Eassa

IT262

Operations Research

Introduction



Outline

1. About me
2. Course content
3. Course Objectives
4. Discussion Session
5. References

About me

- **Name:** *Mohamed Ahmed Eassa*
- **Professional Background:**
 - Head of the Artificial intelligence Department
 - Conducting research Artificial intelligence, machine learning, deep learning and data science
- **Education:**
 - PhD in computer science
 - MS in computer Science
- **Interests:**
 - Artificial intelligence and data science
 - Continuous learning and lecturing

Course content

1. The nature of operations research
2. Linear programming: Formulations and graphical solution.
3. Algebraic solution: the simplex methods
4. Sensitivity analysis
5. Transportation and assignment problems
6. integer programming
7. Dynamic programming

Course Objectives

1. **Understand mathematical methods** for solving complex optimization problems, including linear, dynamic, and integer programming.
2. **Apply Operation Research techniques** like the simplex method, sensitivity analysis, and transportation models to real-world decision-making scenarios.

Discussion Session Schedule

- **When:**

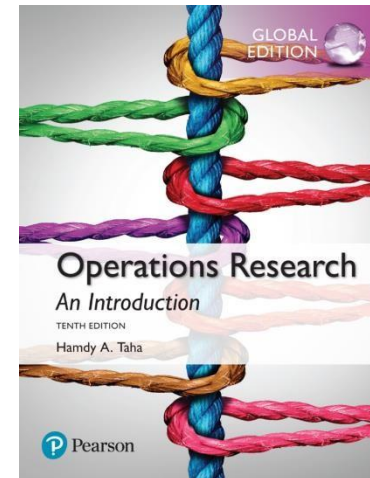
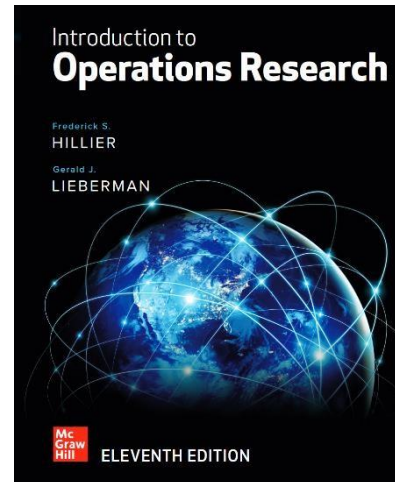
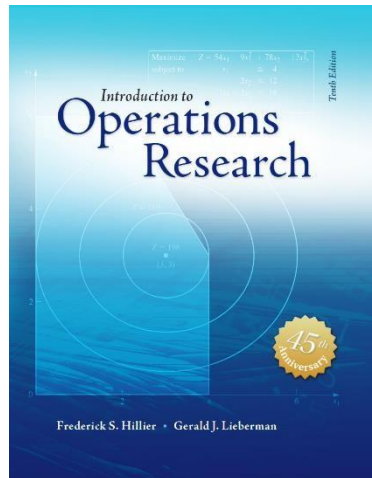
Every Sunday

Time:

9:00 PM - 10:00 PM

References

- Hillier F. Introduction to Operations Research 10ed 2015(11ed 2021)
- Taha H. Operations Research. An Introduction 10ed 2017





Thank You