UNIVERSITY OF NEVADA LAS VEGAS
Civil and Environmental Engineering and Construction Department
CEE 762 Operations Research Applications in Civil Engineering

Course Description

Analysis of civil engineering systems using operations research methods and techniques. Methods covered include optimization models in deterministic systems, network models, and queuing theory. Applications drawn from various civil engineering contexts.

Prerequisites

Graduate standing

Required Skill

main points of contact for each group. Groups are mandated to periodically meet with their faculty advisor and MSQF program director and report about work in progress and/or seek necessary guidance. It is the responsibility of each of the groups to set up these meetings.

Using the OR Courseware and Excel Solver
Integer Programming (Chap 12)
Transportation and Assignment Problems (Chap 9)
Network Optimization Problems (Chap 10)
Non-linear Programming (Chap 13)
Stochastic Modeling
Queuing Theory and Applications (Chap 17)
Simulation (Chap 20)

Class Assignments

Assignment Policy

Assignments should be submitted in class on their due dates. In general, you will have about a week or two to work on each assignment. Assignments submitted late without pre-approval by the instructor will be subject to penalty or may not be accepted. Late submissions will not be accepted after solutions have been distributed or discussed in class.

Students are encouraged to discuss the assignments withttowith

Disclaimer: The contents of this document are to be considered "tentative" and subject to change as the instructor deems necessary.

Grading