

OR 649: Topics in Optimization

Summer 2009

Innovation Hall, room 137

Tuesdays 4:30-8:10pm

Professor in Charge: Ariela Sofer

Office: Engineering Building 2104

Phone: 703-993-1670

E-mail: [asofer@gmu.edu](mailto:asofer@gmu.edu)

Office hours: Tuesday 2-4pm, and by appointment; via e-mail at other times

Prerequisite: OR 541 and some knowledge in advanced probability

Some course materials will be posted at <http://courses.gmu.edu>

Overview: This course provides an overview of a number of topics in optimization that are not regularly taught in the SEOR curriculum. Each topic will be a 1-2 weeks long module and the various modules will be taught by different instructors. The tentative schedule is as follows:

Lecture No.	Dates	Professor	Topic (Module)
1	5.19		Review of Optimization; Optimization in Medicine
2,3	5.26 6.2	Chen	Simulation-based Optimization
4,5	6.9 6.16	Nash	Optimization in Model Management
6	6.23	Speller	Supply Chain Management
7,8	6.30 7.7	Ephraim	Estimation from Incomplete Data
9	7.14	Hoffman	Auctions
10	7.21	Speller	Supply Chain Management

**Grading** There will be no final exam. Each instructor will assign homework or a mini-project and will grade his or her module. The final grade will be the weighted average of the module grades, where the worth is relative to the number of weeks in the modules (1 week modules are worth 10% of the grade and 2-week modules are worth 20% of the grade each). The final grade will be determined by Dr. Sofer.

All works are to be done individually in accordance with the George Mason Honor Code. Instructors may choose to use team work and then the work of each team should be independent.