APM 236F - (Applied) Linear Programming- 2015

Welcome to APM 236F, a course in Linear Programming. The title of the course can be a bit misleading. We won't be programming on a computer in this course.

Objective

The goal of this course is to present the student with a basic knowledge of the theory of linear optimization. That is, we will study the question of optimizing a linear function subject to linear equality and inequality constraints. We will take both an algebraic and geometric point of view.

Lectures

L0101 MWF12 MP 102 E. Mazzeo emazzeo@math.toronto.edu

Prerequisites:

MAT223H / MAT240H (Note: no waivers of prerequisites will be granted)

Suggested Readings:

1. "Elementary Linear Programming with Applications" by Kolman & Beck, 2nd edition.
2. "Introduction to Linear Optimization" by Bertsimas and Tsitsiklis.

Reading either of these books as a complement to the lecture notes is fine. The first one is more introductory and is available at the Bookstore, as well as on the University of Toronto Library website. The second one is more geometric in nature, more advanced, will serve you in future courses, but is not available at the bookstore (in large numbers).

Office Hours

My office hours will take place by appointment before our classes in the hallway outside our classroom or in a room to be announced, beginning in the 2nd week of classes. Please let me know before the end of the previous class if you would like to meet with me, and we will schedule a meeting before the next class. Students are encouraged to come to office hours for, small group or one on one, assistance in understanding the course material. Office hours are also a good opportunity to ask questions on material that was covered earlier in the course.

Website

The website for the course is available at:
http://www.math.toronto.edu/courses/apm236h1/20159/apm236.html

Quizzes

There will be three, 50-minute, quizzes each worth 15% of your final mark. They will take place in the lecture time-slot on select Fridays, but most likely in a different room.

Quiz 1	Week #4	Friday, Oct. 9th
Quiz 2	Week #7	Friday, Oct. 30th
Quiz 3	Week #11	Friday, Nov. 27th

Evaluation Scheme

The grading scheme will be as follows:

Quizzes	45% (3 of them, each of them worth 15%)
Final Exam	55%

Missing Quizzes

Quizzes that are missed due to legitimate extenuating circumstances, such as illness must be supported by appropriate documentation. Please visit www.illnessverification.utoronto.ca for more details. The appropriate UofT medical certificate should be submitted to the course coordinator within three working (3) days of the date of the test. In such a case, the weight of the quiz will be transferred to the final exam. There will be no make-up quizzes. Missing a quiz without the proper supported documentation will result in a grade of zero (0).

E-mail policy

1. Please address your professor appropriately. 2. You must use your utoronto.ca email account. 3. Please include **236** in the **subject** line of your e-mail. 4. Questions about how to solve math questions should be asked in person during contact hours. 5. Please read the syllabus and homepage to see if your administrative question has been answered there. 6. Please don't expect a reply on weekends, or an immediate reply on weekdays.

Academic Integrity:

Students are responsible for being familiar with all aspects of academic integrity. Please visit the website www.artsci.utoronto.ca/osai for more information.

Accessibility:

If you have a learning need requiring an accommodation the University of Toronto recommends that students immediately register at Accessibility Services at http://www.accessibility.utoronto.ca/index.htm. As the instructors of this course, you are also invited to communicate with us at any time about your learning needs. Confidentiality of learning needs is respectfully and strictly maintained.

Wishing you all a rewarding learning experience!