

Course: **Math 657—Optimization Theory**  
 Time: Spring 2016, 5:35-6:50 PM MW, JB 335  
 Instructor: Tom DeLillo, JB 355, 978-5292 (office), 264-7806 (home)  
 Email: delillo@math.wichita.edu  
 Web page: <http://www.math.wichita.edu/~delillo>  
 Office hours: most afternoons or by appointment

Required text: A. Beck, *Introduction to Nonlinear Optimization - Theory, Algorithms, and Applications with Matlab*, SIAM, 2014.

(Another book that may be of interest and a possible source of projects for students interested in the power grid is D. Bienstock, *Electrical Transmission System Cascades and Vulnerability - An Operations Research Viewpoint*, SIAM, 2016. Those interested in possible projects can discuss this with me early in the semester.)

#### Syllabus (approximate)

Chapters	weeks
1-12 (We will try to complete the book)	13
tbd: Other selected topics	2

#### Grading (approximate)

Homework (may include options for MATLAB assignments)	100 points
Exam I	100
Final exam/Project and presentation	<u>100</u>
	300 points total

*Grading scale:* I usually “curve” the final grade distribution. I will assign grades in a reasonable manner and try to keep you informed of your grade relative to the rest of the class.

*Attendance policy, etc.:* Regular attendance is mandatory. I will pass around an attendance sheet during each class. Good attendance will count in your favor, if your grade is borderline. If you fall behind or have other problems with the class, please contact me *as soon as possible*. Turning in homework late, missing class, or missing exams for any reason is highly discouraged and may lower your grade. I will try to be helpful if you have special difficulties.

#### Important dates:

Spring break: 3/14–3/20.  
 Last day to drop with a “W”: 4/1  
 Last day of classes: 5/5.  
 Final exam: Wednesday 5/11, 5:40–7:30 PM, in classroom.