## MATH 4553, Linear and Nonlinear Programming

## Spring 2014

MWF 2:30-3:20pm, Classroom: MSCS 445

- Course description: Prerequisites: MATH 2163, MATH 3013. Linear programming, simplex methods, duality, sensitivity analysis, quadratic programming and constrained nonlinear programming.
- Instructor: Yanqiu Wang
  - Office: 441 MATH (405-744-5698).
  - Office Hours: MWF 1:30 2:30 pm or by appointment.
  - O Email: yqwang (AT) math.okstate.edu
- Webpage: <a href="http://www.math.okstate.edu/~yqwang/teaching/math4553">http://www.math.okstate.edu/~yqwang/teaching/math4553</a> spring14/
- **Textbook:** Linear programming with Matlab, M.C. Ferris, O.L. Mangasarian and S.J. Wright, MPS-SIAM Series on Optimization, 2007.

**Supplementary reading:** Linear Programming, Foundations and Extensions, R.J. Vanderbei, Springer, 3<sup>rd</sup> ed., 2008. (Electronic access to full text from OSU library).

**Supplementary reading:** Linear and Nonlinear Programming, D.G. Luenberger and Y. Ye, Springer 2003. (Electronic access to full text from OSU library).

- **Grading policy:** Your final grade will be based on the following:
  - 5 homework, 20 points each (100pts);
  - O Two mid-term Exams, 50 points each (100pts);
  - O Final Exam (100pts): comprehensive;
  - O The Total is 300 pts: A (>=90%), B (>=80%), C (>=70%), D (>=60%).

## Make-up policy:

- O Make-ups for exams will only be allowed for an authorized absence under University Regulations. Normally a written note is required. Student should contact the instructor to schedule a make-up by the end of the next working day after the missed exam.
- O There is NO make-up for homework assignments. You sacrifice 5 points per day for each late homework assignment.
- **Syllabus Attachment** Check the following link for Syllabus Attachment for university-wide rules regarding dropping a course, academic integrity, and office of student disability services <a href="http://academicaffairs.okstate.edu/images/Patty/FacultyandStaffResources/Syllabus/spring%202014%20syllabus%20final%20with%20copyright%20statement.pdf">http://academicaffairs.okstate.edu/images/Patty/FacultyandStaffResources/Syllabus/spring%202014%20syllabus%20final%20with%20copyright%20statement.pdf</a>