

# MATH 4553, Linear and Nonlinear Programming

Spring 2012

MWF 2:30-3:20pm, Classroom: Life Science East 217

- **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: MW 10:30 am – 12:30 pm or by appointment.
  - Email: yqwang (AT) math.okstate.edu
- **Webpage:** [http://www.math.okstate.edu/~yqwang/teaching/math4553\\_spring12/](http://www.math.okstate.edu/~yqwang/teaching/math4553_spring12/)
- **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);
  - Two mid-term Exams, 50 points each (100pts);
  - Final Exam (100pts): comprehensive;
  - The Total is 300 pts: A ( $\geq 90\%$ ), B ( $\geq 80\%$ ), C ( $\geq 70\%$ ), D ( $\geq 60\%$ ).
- **Make-up policy:**
  - 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.
  - 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  
<http://academicaffairs.okstate.edu/faculty-a-staff/48-syllabus-spring>