

## MATH 4513, Numerical Mathematics: Analysis Fall 2012

MWF 1:30-2:20 pm, CLB 101

- **Course description:** Prerequisite(s): 2233, 3013, knowledge of programming or consent of instructor. Machine computing, algorithms, and analysis of errors applied to interpolation and approximation of functions solving equations and systems of equations, discrete variable methods for integrals and differential equations. (Same course as CS 4513)
  
- **Instructor:** Yanqiu Wang
  - Office: 441 MATH (405-744-5698).
  - Office Hours: MWF 11:30 am – 1:20 pm or by appointment.
  - Email: yqwang (AT) math.okstate.edu
- **Webpage:** [http://www.math.okstate.edu/~yqwang/teaching/math4513\\_fall12/](http://www.math.okstate.edu/~yqwang/teaching/math4513_fall12/)
  
- **Textbook:** *Numerical Analysis*, R.L. Burden and J.D. Faires, 9<sup>th</sup> ed.  
**Supplementary readings:**
  - *Numerical analysis: mathematics of scientific computing*, D.R. Kincaid and E.W. Cheney.
  - *Applied Numerical Analysis*, C.F. Gerald and P.O. Wheatley.
  - *Theory and Applications of Numerical Analysis*, G.M. Phillips and P.J. Taylor.
  - *Numerical Methods with Matlab*, G. Recktenwald. (<http://web.cecs.pdx.edu/~gerry/nmm/>)
  - *Numerical computing with Matlab*, C. Moler. Free available at [http://www.mathworks.com/moler/index\\_ncm.html](http://www.mathworks.com/moler/index_ncm.html)
  
- **Grading policy:** Your final grade will be based on the following:
  - Homework assignments (5\*20 points);
  - Mid-term exam (100 points);
  - Final Exam, comprehensive (150 points);
  - The Total is 350 points: 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 <http://academicaffairs.okstate.edu/faculty-a-staff/46-syllabus-attachment> (Syllabus Attachment) for university-wide rules regarding dropping a course, academic integrity, and office of student disability services.