

CSCE5230/MATH5290: Methods of Numerical Computations
NTDP B157 5:30-6:50PM T/R

Instructor: Dr. Yanyan He, GAB 440H & NTDP F293, yanyan.he@unt.edu
Office Hours: 11-12 (T/R, GAB 440H), 3:30-4:30 (T/R NTDP F293) or *by appointment*

Textbook: None

Prerequisite: Calculus, Linear Algebra, and Programming.

Course Content:

Introduction to numerical methods, system of equations and matrix decomposition, singular value decomposition, least squares problems, and numerical integration, nonlinear equations, polynomial and spline interpolation, and Monte Carlo methods.

Grading:

Homework/Programming Projects: 80%.

Final exam: 20%

Homework rules:

- Homework problems involve proofs, computer programming with MATLAB, and numerical computations.
- Homeworks are due in class. Late homework papers are NOT accepted.
- If the assignment involves computer programming, submit its text and formatted output. Give a summary and a discussion of your results.
- Individual work is required on all graded assignments. You may discuss an assignment with classmates, but what you submit must be your own thoughts and work.

Academic Integrity:

The content of the Student Handbook regarding the University's Policy of Academic dishonesty applies to this course. The occurrence of academic dishonesty will result in the grade of F for the course.

Americans with Disabilities Act:

With the passage of new federal legislation entitled Americans with Disabilities Act (ADA), pursuant to section 504 of the Rehabilitation Act, the University of North Texas provides reasonable accommodations for students with disabilities. We encourage you to contact the Office of Disability Accommodation if you have a disability for which you require accommodation.

IMPORTANT NOTICE: The instructor keeps the right to make necessary changes for this course during the whole semester!