

MAE2360 Syllabus

Fall, 2009

Instructor's Name: **Seiichi Nomura**

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Office Hours: **2PM-4PM TTh or by appointment**

Course Number, Section Number and Course Title: **MAE2360-001/002, Numerical Analysis and Programming**

Time and Place of Class Meetings: **1:00PM-1:50PM MW, Room 210 Woolf Hall (lecture), 2:00-4:50 W Room 311RH (lab)**

Description of Course Content:

- **Part I Programming**
 - **Introduction to Unix**
 - **C language**
 - **FORTRAN, MATLAB**
- **Part II Numerical analysis**
 - **Roots of equations**
 - **Numerical differentiation/integration**
 - **Matrix manipulation**
 - **Differential equations**
 - **CGI programming**

Student Learning Outcomes:

1. **Exposure to scientific computer programming (C, FORTRAN, Matlab)**
2. **Mastery of numerical analysis**

Requirements: **MATH2425 or concurrent enrollment**

Required Textbooks and Other Course Materials: [None](#)

- **References:**
 - *Engineering Problem Solving with ANSI C* by Delores M. Etter, Prentice Hall
 - *Engineering Programming C, MATLAB, JAVA* by Mark Austin and David Chancogne, John Wiley & Sons, Inc.

Descriptions of major assignments and examinations with due dates:

- **Homework problems are posted on the Web.**
- **Homework turned later may obtain up to 50 % credit.**
- **Exams are closed book/note.**

Grading Policy:

- **One midterm and final: 60% (30+30)**
- **Homework (and lab reports): 35%**
- **Attendance: 5%**

Attendance Policy: **Attendance required**

Drop Policy: **Please see the University catalog.**

Key Assignments: This course specifically assesses your ability for techniques skills and tools for solving engineering problems by programming. Therefore, certain related assignments in this course must be passed in order to pass the course. **The midterm exam and one of the homework assignments before the final are designated as key assignments.** These assignments are designated as key assignments. In order to pass this class, students must submit and pass all key assignments. If any key assignment is not submitted and passed, the student will not pass the class even if he/she scores perfectly on all exams and other assignments.

Americans with Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal opportunity legislation; reference Public Law 92-112. The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled Americans with Disabilities Act (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens. As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364.

Academic Integrity: It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or part to another person, taking an examination for another person any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regentsf Rules and Regulations, Series 50101, Section 2.2)

Student Support Services Available: The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally or socially should contact the Office of Student Success Programs at (817) 272-6107 for more information and appropriate referrals.

