MATH 609-602: Numerical Methods

Lecturer:	Prof. Wolfgang Bangerth Blocker Bldg., Room 507D (979) 845 6393 `bangerth@math.tamu.edu`
Office hours:	Wednesdays, 9:00–11:30am
Lecture:	Tuesdays + Thursdays, 9:35–10:50am Blocker Bldg., Room 624
Teaching Assistant:	Seungil Kim Blocker Bldg., Room 507A (979) 862 3259 `sgkim@math.tamu.edu`
Office hours:	Monday, 1:30–2:30pm
Lab:	Wednesdays, 1:50–2:40pm Blocker Bldg., Room 126

Course Outline
Basics
Solution of nonlinear equations
Solution of systems of linear equations
Approximation
Numerical differentiation and integration
Numerical methods for ordinary differential equations (ODE)

Textbook
D. Kincaid and W. Cheney: Numerical Analysis, 3rd edition, 2002
Brooks & Cole Publishing Co.

Prerequisites
Basics of programming in C/C++ (preferred) or Matlab or Fortran.

Webpage
Homework assignments and other course information will be posted at the course webpage
> `http://www.math.tamu.edu/~wolfgang.bangerth/teaching.html`

Exams + Grading
Final course grades will be computed from homework and programming assignments (50%) and exams (50%).

Two exams (tentatively 9/29/2005, 11/10/2005, 15% each) and one comprehensive final exam (12/9/2005, 20%).

Make-up exams: Students must make arrangements in advance if they will not be handing in homework on time or will miss an exam. Absences due to recognized University-related activities, religious holidays, verifiable illness, and family/medical emergencies will be dealt with on an individual basis, but require a written excuse. Please let Dr. Bangerth know about this as soon as possible, and preferably in advance.

Incompletes: I will consider giving an incomplete if you have successfully completed all but a small portion of the work of the course, and are prevented from completing the course by a severe, unexpected event. Simply being behind work is not a reason for an Incomplete, though; in that case you should consider dropping the course.

S/U grades: If you are registered S/U your grade will be 'S' if your letter grade is C or above, and 'U' otherwise.

Policies

Academic integrity: The usual rules of academic intregrity apply. In particular, the Aggie Honor Code "An Aggie does not lie, cheat or steal, or tolerate those who do" should be selfevident, see

> http://www.tamu.edu/aggiehonor.html

Students may, and are encouraged to, work together and discuss homework problems with each other. However, copying work done by others is an act of scholastic dishonesty and will be persecuted to the full extent allowed by University policy.

Disabilities: If you have a disability and need special assistance, please contact me so we can make accomodations. The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accomodation of their disabilities. If you believe you have a disability requiring an accomodation, please also contact Services for Students with Disabilities, Koldus 126, 845-1637.

For other policies and other information, please read

> http://www.math.tamu.edu/teaching/operationspg.html