Analysis of Numerical Algorithms for Computational Mathematics—CSC D37

Computer Science | Course Description | January 3, 2024.

Most mathematical models of real systems cannot be solved analytically and the solution of these models must be approximated by numerical algorithms. The efficiency, accuracy and reliability of numerical algorithms for several classes of models will be considered. In particular, models involving least squares, non-linear equations, optimization, quadrature, and systems of ordinary differential equations will be studied.

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Office Hours: (All times are in Eastern Time ET.)
Wednesdays 11:30-12:30ET, or by appointment.

Website: *http://www.utsc.utoronto.ca/∼pancer/cscD37*

Lectures: LEC01 Wednesdays 9:10-11:00ET in IC-320, 14:10-15:00ET in IC-120.

Suggested Text: M.T. Heath, *Scientific Computing: An Introductory Survey (Second Edition)*, McGraw-Hill, ISBN 0-07-239910-4.

Grading:

Final Exam	- 40%
Term Test	- 25%
Assignments	- 35%

To pass this course, you need a total mark of at least 50%, and you must receive at least 35% on the final exam.

The Term Test and Final Exam are *closed-book*. No aids allowed; no devices.

Late policy: Completed assignments must be submitted electronically on *MarkUs* by the date and time shown on the assignment handout. Late assignments will be accepted up to 24 hours past the due time with a penalty of 25%.

Absence Declaration in ACORN:
You may use the new *Absence Declaration Policy* **once only** during the term for an assignment or the term test. Click here for details.