Finite difference and finite element methods for partial differential equations (PDEs). Consistency, stability and convergence of methods. The solution of linear and nonlinear algebraic equations that arise from the discretization of PDEs.

**Prerequisite:** CSC351H1/(CSC336H1 (75%))/equivalent mathematical background; MAT237Y1/MAT257Y1; APM346H1/APM351Y1/(MAT244H1/MAT267H1 and exposure to PDEs); CGPA 3.0/enrolment in a CSC subject POS.

**Instructor:** Ken Jackson, BA 4228, 416–978–7075 or krj@cs.utoronto.ca

**Office Hours:** by appointment

**Email:** I’ll try to answer your email within a day or so. If my reply will be long, I’ll probably ask you to talk to me instead about your question. If the answer to your question will benefit many students in the class, I will likely copy it to the class (after removing anything from it that will identify you).

I get a lot of email, so it is a good idea to start the Subject line of your email with “CSC 446” so that I can easily distinguish it from other email.

**Web Page:** [http://www.cs.toronto.edu/~krj/courses/446/](http://www.cs.toronto.edu/~krj/courses/446/)

**Bulletin Board:** Coming soon. I’ll try to read this every day or two.

**Lectures:** Mondays, Wednesdays and most Fridays, 1–2 PM in BA 3012.

**Tutorials:** Fridays (when there is not a lecture), 1–2 PM in BA 3012.


**Grading:**

1. Term Assignments: 30%  
   (Three assignments due February 15, March 8, April 5)

2. Midterm Test: 25%  
   (March 1)

3. Final Exam: 45%.

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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 Midterm Test and Final Exam are both closed-book: no aids and no calculators allowed.

**Late Policy:** Completed assignments must be submitted at the beginning of the lecture/tutorial on the day on which they are due. Late assignments will be accepted at the beginning of the next lecture/tutorial, with a penalty of 25%. Assignments will not be accepted after that time unless you have a very good reason for being late.

**Plagiarism:** Please read
http://www.cs.toronto.edu/~clarke/acoffences/
http://www.artsci.utoronto.ca/osai/students

**Accessibility Services:** The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible. See http://www.accessibility.utoronto.ca/