Instructor: Dr. Harbir Lamba
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Office Hours: Monday and Wednesday 5.00-5.50. There will also (usually) be office hours on Friday changing weekly. Check the webpage for details.
Webpage: http://math.gmu.edu/~harbir/m686/

The Course: Runge-Kutta and multistep methods for solving ODEs. Finite difference methods for initial value problems, two-point boundary value problems, poisson equation, heat equation, first-order partial differential equations.

The course will be graded on the basis of a midterm exam (March 17th), a (cumulative) final exam (May 5th) and two numerical projects that will be set during the term (dates to be announced). The midterm and the two projects will each be worth 20%. The final exam will be worth 40% of the marks. No outside materials will be allowed during the exams and no collaboration will be allowed on the projects.

In addition there will be homework problems set at the end of each class. These should not be handed in but you are STRONGLY advised to study them and write out your solutions properly. You are also encouraged to discuss these problems amongst yourselves and make use of the office hours. I will go through many of the homework problems in the following class and you will not benefit from this if you have not made a serious attempt at them beforehand.

I plan to cover at least chapters 1,2,3,4,5,7,13,14. I will cover parts of chapters 6,8,11 and 12 if time allows.