Prerequisite: Background in Calculus, linear algebra and differential equations.


Course content: This is a course in computational methods for students in science and engineering. Topics include root finding of equations (Chapter 3), Function interpolation and numerical differentiation (Chapter 4), numerical integration (Chapter 5, 6), systems of linear equations (Chapter 7, 8), Numerical solution of partial differential equations (Chapter 15) if time permits.

Matlab will be used as the primary computer language for the course. However, a student may choose any other language for projects.

Attendance Policy: Regular attendance is expected. School policy also requires that all cell phones should be turned off during class.

Homework: It is nearly impossible to learn mathematics without working problems yourself. There will be graded homework assignments due each week covering the material learned during the previous week.

Quizzes: There will be three in class Quizzes on dates to be announced later.

Exams: There will be one in class midterm exam Wednesday February 25th.

I will strongly adhere to a no make-up exams policy.

Final Exam: Monday May 11th 8-10 am.

Note that, per USC policy, the date or time of the final exam may not be changed. It is University policy that final exams may not be taken early. Please make your travel plans accordingly.
E-mail: I will frequently use e-mail to contact the class with announcements or other information. Please check your University email regularly. Also, if you need to contact me feel free to e-mail me at tuffaha@usc.edu

Calculation of Final Course Grade:

Three Quizzes: 5% each.

Computer Projects: 10%
Homework: 15%
50 Minute Exam: 25%
Final Examination: 35%

Important Dates:
Last day to drop a class without a mark of “W”: Friday, Jan. 30.

Last day to drop a class with a mark of “W”: Friday, April 10.

Last day of classes: Friday, May 1.