Instructor: Brian Sittinger
Email: brian.sittinger@csuci.edu
Office: Bell Tower 2840
Office Hours: MW 10:30 - 11:30 AM, and by appointment.
Class Times: MW 9:00 - 10:15 AM
Class Location: Ojai 1964

Prerequisites: Math 350, or consent of instructor.

Text: Partial Differential Equation for Scientists and Engineers by Stanley Farlow.

Course Website: http://faculty.csuci.edu/brian.sittinger/math450page.html
This may be also directly accessed through Blackboard (CI Learn).

Course Description from the Course Catalog: Topics include: Vector field theory and Fourier Analysis.

Learning Outcomes: Through this course, students will be able to

- Apply and solve ordinary differential equations such as those of classical mechanics.

- Apply and solve numerically partial differential equations such as Maxwell’s equations and the Diffusion and Schrödinger equations.

- Demonstrate skills in various methods of equation solving, including matrices, eigenvalues, and electronic structure calculations.

- Apply Monte Carlo and other simulation methods.

- Demonstrate skills in Computer Algebra uses in physics.

Grading: Grades will be determined as follows:

- Homework (30%)
- Midterm Exam (30%)
- Final Exam (40%)
Homework: I will assign homework daily to be turned in on every Monday (unless otherwise stated) at the beginning of lecture. Make sure that your presentations are well-organised. If you use more than one sheet of paper, please write your name at the top of each sheet, and be sure to staple them all together. This will make my job to grade them much easier. No late homework will be accepted more than 2 weeks after the official due date, no exceptions!

Exams: The midterm exam will be of the take-home variety. Collaboration is encouraged, but the solutions must be your own work. The final exam will take place on Monday 12 May from 8 to 10 AM. Unless you have a genuine doctor’s note, you have to take the exams when they are given.

Math 399: Please sign up for Math 399 Section 4 or 9. Further instructions will be given in the lab.

Academic Honesty: Cheating and plagiarism will not be tolerated in this class. For information on the University’s policy, please read the University Catalog (“Policies and Regulations” section).

Disability Statement: Cal State Channel Islands is committed to equal educational opportunities for qualified students with disabilities in compliance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990. The mission of Disability Accommodation Services is to assist students with disabilities to realize their academic and personal potential. Students with physical, learning, or other disabilities are encouraged to contact the Disability Accommodation Services office at (805) 437-8510 for personal assistance and accommodations.

Disclaimer Statement: Information contained within this syllabus, other than that mandated by the University, may be subject to change with advance notice, as deemed appropriate by the instructor.