Fall 2018 Course: Physics 162 Scientific Computing & Simulation: Basic Methods

Designed for Science & Engineering Students



You will acquire computational skills applied to the solution of scientific problems:

- How to model a problem and make it solvable with numerical methods
- How to solve the resulting equations numerically
- How to represent the solution graphically

These skills will serve you well whether in graduate school or the professional world.



Course details: (3 units)

Prerequisite

Math 26 or Math 30 AND Physics 5A or Math 30 and Physics 11A

or Math 105A concurrently (for Math majors).

Course description:

The course uses python and C++ as tools in numerical solutions of scientific problems and graphical representation of results. No prior knowledge of programming is assumed, and practical experience is emphasized throughout.

Time: Section 1: Mondays, Wednesdays, 1-2:15 PM (open) Section 2: Mondays, Wednesdays, 3-4:15 PM (if sufficient demand)

This class is one of two computing classes (with Physics 163) required to earn a *Certificate in Scientific Computing*.



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Or go to http://tiny.cc/SacSciComp