Syllabus Physics 2200 – Computational Physics

Fall semester 2016

http://www.phys.uconn.edu/~rozman/Courses/P2200_16F/



Last modified: August 29, 2016

Lectures: TuTh 5:00 – 6:15, P121, Physics Building

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office hours: TBA

Course Description: Physics 2200 *Computational Physics* provides an introduction to the following topics:

- numerical methods for the physical sciences
- programming and programming languages
- analysis of algorithms and computer science
- operating systems used for research

Course Goals:

• Introduce methods and approaches for solving physics problems numerically

- Explain advantages and limitations of common numerical techniques
- Learn and practice writing flexible, efficient, and practical code
- Get acquainted with software development tools and systems
- **Computer Lab:** Physics Computer Lab, remote access to the computers is available and encouraged
- **Course Webpage:** http://www.phys.uconn.edu/phys2200/

Reading: No required textbook; course handouts will be provided

Homework: Approximately weekly homework assignments

- **Honors conversion:** Students interested in honors conversion should contact the instructor during *the first two weeks of classes*.
- Exams: In class midterm exam, two midterm projects and a take-home final project
- **Grades:** Physics 2200 draws students with very different background in physics, mathematics, and programming. For the purpose of grading what matters in this course is the progress you made during the semester. Efforts and motivation do not go unnoticed; so does a lack of any efforts and progress.

Course grades will be determined with the help of the following weights:

Class participation	10%
Homework	30%
Midterms	30%
Final project	30%

Communications: The instructor's preferred way of communications is a talk in person. The second best way is an email.

Please include the tag "[phys2200]" (without quotes, no spaces) in the subject of your email, e.g. "[phys2200] midterm II project". An email with the subject "Crashing" from someone named "SalsaMozarella" has a very good chance of being ignored.

Please do not send attachments larger than 10KB without asking first. Use UConn's large file sharing system https://dropbox.uconn.edu/dropbox when possible.

The policy is to always reply to course-related emails. If your communication remains without an answer, it is safe to assume that the message has not reached the instructor.