Syllabus MAT331

Instructor: Marco Martens

- Office: 4-113 in the Math Tower.
- email: marco@math.sunysb.edu
- Office Hours:
  Tu Th: 11:30-1300
  or
  by appointment

Textbook: No text book.

Grades policy: The class consists of three or four projects. At the end of a project the student writes a report. Each report accounts equally for the final grade. Both the expository and computational aspects of the project write-ups will be graded.

It is not useful to use chatgpt or similar tools to write the project. To discourage the use of these tools, after a report is handed in the student will have to do a small quiz. The final grade will be based on

$$\text{minimum}\{P, Q\}$$

where P is the grade for the project and Q the grade for the quiz. In particular, if you got a good grade for the project but were not able to answer simple quiz question about the project, the grade will be the quiz grade.

The reports can be used for the undergraduate writing requirements. You have to register.

Projects: Each project will be inspired by a real life problem from different areas in science and engineering. Usually, it will take a couple of weeks to find a useful solution. A quarter of the time will be used as a regular lecture. The instructor will give sufficient background on the problem. This includes a describtion of the problem but also material on the necessary mathematical tools. The remainder of the time will be used by the students to solve the problem. During this phase the instrcutor will give feedback on the progress of each student.

Computers: This course is not an introduction to a specific computer language. The computer is just a tool. The programs needed to do the experiments for solving the problem will be provided by the instructor. We will rely mostly on Maple (a program that can do algebra, calculus, graphics, etc.), although if other tools are better suited to the task, we may make use of them. No previous experience with

computers is needed. Maple is available for most platforms (Windows, Macintosh, Linux, . . .); Stony Brook students can buy a copy of Maple at the Seawolves Market Place for five dollars. Maple is also available at all Stony Brook Sinc Sites. You might be able to download a copy for Windows or Mac from Softweb. The time in class should be enough for the computer experiments.

Wepage for the course: The webpage for the course can be found by clicking

1) Go to www.math.sunysb.edu/ marco
2) Click education
3) Click MAT331

On the webpage you can find the office hours, the syllabus. and other relevant information, and most importantly the program needed for the experiments.

Information for students with disabilities: If you have a physical, psychological, medical, or learning disability that may impact your 3 course work, please contact Disability Support Services at (631) 632-6748 or http://studentaffairs.stonybrook.edu/dss/. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website:

http://www.sunysb.edu/ehs/fire/disabilities.shtml

Academic Integrity: Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another persons work as your own is always wrong. Faculty are required to report any suspected instances of academic dis- honesty to the Academic Judiciary. For more comprehensive informa- tion on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary/

Critical Incident Management: Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students ability to learn.