MAT 203: Calculus III with Applications

Spring 2023

Class Location: Earth & Space 001 MW 6:05pm-7:25pm

Instructor: Dr. Ethan L Addison

Office: Math Tower 3-116

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Official Description: Vector algebra in two and three dimensions, multivariate differential and integral calculus, optimization, vector calculus including the theorems of Green, Gauss, and Stokes. Applications to economics, engineering, and all sciences, with emphasis on numerical and graphical solutions; use of graphing calculators or computers. May not be taken for credit in addition to AMS 261 or MAT 205.

SBC: STEM+ Credits: 4

Prerequisite: C or higher in MAT 127 or 132 or 142 or AMS 161 or level 9 on the mathematics placement examination

Teaching Assistants: Daniel Brogan http://www.math.stonybrook.edu/cards/brogandaniel.html Austin Konkel https://www.math.stonybrook.edu/cards/konkelaustin.html

Office Hours: See http://www.math.stonybrook.edu/cards/addisonethan.html to stay up to date, as these are subject to change. I have both Zoom and in-person hours, and feel free to schedule an appointment. The TAs also hold hours in and out of MLC which can be found on their cards.

Grade Thresholds: A 90, A-85 B+80 B 75 B-70 C+65 C 60 C-55, D+50, D 45, D-40, F 0

Grading Scheme: Your course grade will be computed based on the following combination of factors:

• Recitation (15%)

- Webassign (20%)
- Exam 1 (20%) Tuesday, Feb 21
- Exam 2 (20%) Tuesday, April 11
- Cumulative Final Exam (25%) Wednesday, May 10, 5:30pm 8:00pm

Brightspace: This will be our main resource for sharing information regarding grades, announcements, and course materials so please check it regularly.

WebAssign: A WebAssign subscription is required to complete homework in this course. Assignments will be posted weekly but are due in less frequent batches to allow for flexibility on your part. It is still advised that you keep up to date with the material nonetheless. Instructions on Brightspace.

Recitation: The fourth credit hour of this course takes place weekly in small group meetings with a teaching assistant in order to facilitate digestion of difficult topics and to work through problems. Paper homework assignments will be turned in during recitation, and regular quizzes will be administered based off of previous WebAssign homework questions.

Textbook: Multivariable Calculus, 12th edition by Larson & Edwards. A digital copy is included in your required WedAssign subscription. A physical copy of a textbook can be a valuable resource, but I encourage you to find a cheap used one for your library as there are many, and the material is standard.

Math Learning Center (MLC): Located in the basement of the Mathematics Tower and virtually through Zoom, the MLC is where you can get free tutoring help with any of your math concerns. No appointment is required; just come in and ask. More at http://www.math.stonybrook.edu/mlc/center-hours.html

Academic Integrity: Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/commcms/academic_integrity/index.html.

Student Accessibility Support Center: If you have a physical, psychological, medical or learning disability that may impact your course work, please contact the Student Accessibility Support Center (SASC), ECC (Educational Communications Center) Building, room 128, (631) 632-6748. They will determine with you what accommodations, if any, 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 the staff at the Student Accessibility Support Center (SASC). For procedures and information go to the following website:http://www.stonybrook.edu/ehs/fire/disabilities.

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. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.