

MAT 307 Syllabus, Fall 2021

Course description: Introduction to linear algebra: vectors, matrices, systems of linear equations, bases and dimension, dot product, determinants. Multivariate differential and integral calculus, divergence and curl, line and surface integrals, theorems of Green, Gauss, and Stokes. More theoretical and intensive than MAT 203, this course is primarily intended for math majors. Together with MAT 308, it forms a 2-semester sequence covering the same material as the 3-semester sequence of MAT 205, MAT 211 and MAT 305. May not be taken for credit in addition to MAT 203, MAT 205 or AMS 261.

Credits: 4

SBC: STEM+

Class time and location: MW 4:25-5:45 pm in Frey Hall 313.

Textbook: Richard E. Williamson and Hale F. Trotter, *Multivariable Mathematics*, 4th edition.

Course webpage: <https://sites.google.com/stonybrook.edu/ahanlon/mat-307>

Note: As we have seen over the last year and a half, unforeseen changes to the schedule or modality may occur. If any such changes occur, I will communicate with you via email as soon as possible. Please regularly check your Stony Brook email account.

Course Instructor: Andrew Hanlon

E-mail: andrew.hanlon@stonybrook.edu

Office: 304 Simons Center for Geometry and Physics

Office hours (in 304 SCGP or via Zoom personal meeting accessed [here](#)): Mondays 2-3pm, Wednesdays 3-4 pm, and by appointment

Math Learning Center hours (via Zoom accessed on [MLC website](#)): Wednesdays 2-3pm

R01 and R02 Instructor: Saman Habibi Esfahani

Office: Math Tower 3-106

Office hours (on Zoom accessed [here](#)): Mondays 8-9 am

Math Learning Center hours (on Zoom accessed on [MLC website](#)): Tuesdays 4-6 pm

Attendance: Attendance is strongly encouraged but not required. If you miss a class, you are still responsible for the material due, for learning all concepts covered, and turning in assignments given. Class participation (answering and asking questions during class) is encouraged.

Blackboard: Some essential course information will be posted on Blackboard. You should have access to both the course Blackboard page and your recitation's Blackboard page.

Gradescope: Homework will be submitted through Gradescope. You should have access to the course Gradescope page. You will receive an email invitation to Gradescope and will be given more information on how to upload your work.

GRADING

Homework	20%
Midterm I	25%
Midterm II	25%
Final exam	30%

If beneficial to you, your lowest scoring midterm exam will be dropped and replaced by your final exam score.

Homework: Homework will be assigned on a weekly basis and collected in Gradescope. Homework will be posted on the course webpage and on Gradescope. Each week, a collection of problems will be selected by the instructors to be graded from the homework. It is in your best interest to complete all assigned problems since you will not know which problems will be graded in advance. Homework is considered due by 11:59 PM ET on the due date. Any homework turned in after that will be considered late. No late homework will be accepted. If you have trouble uploading your homework, then you must contact your recitation instructor and arrange for your homework to be turned in before the deadline.

Your lowest score for homework will be dropped.

You may work with other students on the homework, but you must hand in your own write-ups. Direct copying of solutions, including from online sources, is prohibited by Stony Brook policy and will be reported to the Academic Judiciary.

Examinations: Two 1 hour and 20 minute exams will be given during the semester in class and a 2 hour and 30 minute comprehensive final exam will be given during the final examination period. No books, notes, calculators, or other electronic devices may be used on the exams. You must bring your University ID card to all exams. Our exams are scheduled as follows.

Exam	Date	Time	Location
Midterm I	September 29 (Wednesday)	4:25 – 5:45 pm	Frey Hall 313
Midterm II	November 10 (Wednesday)	4:25 – 5:45 pm	Frey Hall 313
Final Exam	December 8 (Wednesday)	8:30 – 11:00 pm	Frey Hall 313

Students should not make plans to leave before 11:00 pm on Wednesday, December 8, 2021.

MAKEUP EXAMINATIONS: No alternative date will be given for the midterms or the final exam. As noted above, you can drop one midterm exam and have the score replaced by the final exam score.

Under extenuating circumstances, given that the student has a valid documented reason for missing an exam, a makeup exam may be scheduled without penalty at the instructor's discretion within 7 days of the midterm. If such a situation occurs, the student must contact the instructor, Andrew Hanlon, as soon as it is feasible to do so. In particular, the student should contact the instructor before the exam unless there is a clear reason why that is not possible. Valid excuses include illness, family or medical emergencies, religious holidays, etc. Conflicts with other exams, personal business such as travel, employment, weddings, graduations, or attendance at public events such as concerts and sporting events are not valid excuses. Nor is forgetting the date, time or room of an examination a valid excuse. If a student misses an exam, does not have a valid documented excuse, and does not inform the instructor, Andrew Hanlon, then the student gets 0 points for the exam.

Questions, Problems, or Comments: If you have questions or concerns about the course, please consult your recitation instructor or the lecturer, Andrew Hanlon.

Student Accessibility Support Center Statement: If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact the Student Accessibility Support Center, Stony Brook Union Suite 107, (631) 632-6748, or at sasc@stonybrook.edu. 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 the Student Accessibility Support Center. For procedures and information go to the following website:

<https://ehs.stonybrook.edu//programs/fire-safety/emergency-evacuation/evacuation-guide-disabilities> and search Fire Safety and Evacuation and Disabilities.

Academic integrity statement: 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 is 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

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 Student Conduct and Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or

inhibits students' ability to learn. Until/unless the [latest COVID guidance](#) is explicitly amended by SBU, during Fall 2021 "disruptive behavior" will include refusal to wear a mask during classes.