# MAT 307: Multivariable calculus with linear
## algebra Fall 2018

**Course times:**
> Lecture: MW 4:00pm - 5:20pm, Library W4535
> Recitation: M 5:30pm - 6:23pm, Earth&Space 069

**Instructor:** Vardan Oganesyan (vardan.oganesyan@stonybrook.edu)
**Instructor office hours:**
> · Tu 2:30pm - 3:30pm (Math Tower 4-119)
> · W 1:30pm - 2:30pm (Math Tower 4-119)
> · M 1:30pm - 2:30pm (Math Tower S-235—Math Learning Center)

**TA:** Vardan Oganesyan (vardan.oganesyan@stonybrook.edu)

**Required materials:** *Multivariable Mathematics,* Williamson & Trotter, 4th edition. We will cover most of the topics in chapters 1-2 and 4-9, though topics may be included and omitted at the instructor's discretion. You are not required to have a graphing calculator. The following website is one among many useful electronic tools for graphing with several variables: http://web.monroecc.edu/calcNSF/

**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.

**Exams:** There will be two midterms and a final exam.The date of the midterms will be announced at least a week before the exam occurs.  The final exam will occur on **Wednesday, Dec. 12, 8:30pm-11:00pm.**

**Homework:** Assignments will be typically be collected in class on Wednesday and returned to you at Monday recitation. You are encouraged to discuss homework problems with fellow students, but solutions must be written in your own words. No late homework will be accepted.

**Course grades:** Attendance is encouraged but not required. However, if you miss class, you are entirely responsible for all information and announcements that were communicated. Final grades will be computed using the following weights:

| | |
|---|---|
| Homework: | 15% |
| Midterm 1: | 25% |
| Midterm 2: | 25% |
| Final: | 35% |

***Disability Support Services (DSS) Statement:*** If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, 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 Disability Support Services. For procedures and information go to the following website: http://www.stonybrook.edu/ehs/fire/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 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

*Critical Incident Management Statement:* 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.