

MAT 310 Syllabus, Fall 2019

Course description: This will be a mathematically rigorous course in the basics of linear algebra. In other words, we will build the theory of finite-dimensional vector spaces and linear maps starting from the definitions and deducing further facts through mathematical proofs. Major topics will include vector spaces, bases and dimension, linear maps, eigenvalues and diagonalization, inner product spaces, the spectral theorem, and Jordan form.

Credits: 4

Class time and location: TuTh 3:00pm – 4:20pm on **Zoom** ([access through Blackboard](#) -> 1214-MAT-310-SEC31-40529: .MAT 310.31 (R01-R03) Linear Algebra-Spring 2021 -> Zoom Meeting).

NOTE: After 4 lectures and the first midterm exam, some students will have the possibility to switch into MAT 315 with Oleg Viro, who will teach MAT 310 during the first week.

Textbook: Sheldon Axler, Linear Algebra Done Right, Third edition

Course webpage: <https://you.stonybrook.edu/aerchenko/teaching/mat-310/>

Course Instructor: Alena Erchenko

E-mail: alena.erchenko@stonybrook.edu

Office: Math Tower 3-105

Office hours (on Zoom): Tuesdays 6pm-7pm, Fridays 3pm-4pm and by appointment

Math Learning Center hours (on Zoom): Tuesdays 9am-10am

R01 Instructor (Hybrid starting February 23rd): Paul Frigge

Recitation time and location: W 11:45am-12:40pm in Earth&Space 001

Office: Math Tower 2-107

Office hours (on Zoom): Tuesdays 1:30-2:30pm and by appointment

Math Learning Center hours (on Zoom): Tuesdays 5pm-6pm, Thursdays 3:30pm-4:30pm

R02 Instructor (Moving to MAT 315 starting February 23rd): Saman Habibi Esfahani

Recitation time and location: W 11:45am-12:40pm on Zoom

Office: Math Tower 3-106

Office hours: Fridays 8am-9am

Math Learning Center hours (on Zoom): Fridays 5pm-7pm

R03 Instructor: Conghan Dong

Recitation time and location: W 4:25pm-5:20pm on Zoom

Office: Math Tower S-240A

Office hours (on Zoom): Mondays 2:30pm-3:30pm

Math Learning Center hours (on Zoom): Mondays 3:30pm-5:30pm

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. Lectures will be recorded and posted on Blackboard. Class notes will also be posted.

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. Access to the lectures is through Blackboard Zoom meeting. Grades for assignments will be posted on your recitation's Blackboard page.

Gradescope: Submission of exams and homeworks will be through Gradescope. You should have access to the course Gradescope page.

GRADING

Homework	35%
Midterm I	10%
Midterm II	25%
Final exam	30%

Homework: Homework will be assigned on a weekly basis and collected on Gradescope. Homework will be posted on the course webpage. Each week, two 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 the day of your recitation period. No late homework will be accepted. If you cannot upload 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. At this level of mathematics, clear and concise writing is critical. Your solutions will be judged for clarity of formulation in addition to having the correct idea.

Exams: Two midterms will be given during the semester in class and a 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. Exams will be proctored via Zoom. Complaints about technical difficulties during the exams will not be accepted. Exams submitted after the deadline will not be graded. For the exams, you are required to have webcam on your computer. Our exams are scheduled as follows.

Exam	Date	Time	Location
Midterm I	February 16 (Tuesday)	3:00 pm – 4:20 pm	On Zoom (Submission on Gradescope)

Midterm II	March 30 (Tuesday)	3:00 pm – 4:20 pm	On Zoom (Submission on Gradescope)
Final Exam	May 11 (Tuesday)	2:15 pm – 5:00 pm (First 15 minutes for exam administration)	On Zoom (Submission on Gradescope)

MAKEUP EXAMINATIONS: No alternative date will be given for the midterms or the final exam. If a student has a valid documented reason, such as illness or religious holiday, during examination times and informs the instructor, Alena Erchenko, beforehand, then the student is permitted to schedule a makeup examination with no penalty. A missed midterm must be made up within 7 days of the midterm. Students must be prepared to verify the reason for requesting the makeup by providing the proper document(s) upon request. 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, Alena Erchenko, then the student gets 0 points for the exam.

Technical requirements: You will need to be able to access lectures and recitations on Zoom and have access to Blackboard and Gradescope. You will need a webcam for exams and the ability to scan documents in a short timeframe (you can use Google Drive on your Stony Brook account to scan or another scanning app).

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

Student Accessibility Support Center Statement: If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Student Accessibility Support Center, 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 Student Accessibility Support Center. 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 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 University Community Standards 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. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.

Student Absences Statement

Students are expected to attend every class, report for examinations and submit major graded coursework as scheduled. If a student is unable to attend lecture(s), report for any exams or complete major graded coursework as scheduled due to extenuating circumstances, the student must contact the instructor as soon as possible. Students may be requested to provide documentation to support their absence and/or may be referred to the Student Support Team for assistance. Students will be provided reasonable accommodations for missed exams, assignments or projects due to significant illness, tragedy or other personal emergencies. In the instance of missed lectures, the student is responsible for ***the material due, learning all concepts covered, and turning in assignments given***. Please note, all students must follow Stony Brook, local, state and Centers for Disease Control and Prevention (CDC) guidelines to reduce the risk of transmission of COVID. For questions or more information click here: <https://www.stonybrook.edu/commcms/comingback/students.php>.