

# MAT 531 - M002 - Second Course in Linear Algebra

**Instructor:** Stephan Wehrli, 304B Carnegie, smwehrli@syr.edu

The course will cover Chapters 1,2,5, and 6 in the textbook as well as some additional topics if time permits. Mathematically, the course will be similar to MAT 331. However, it is not intended to be an immediate continuation of MAT 331. Rather, it will reintroduce important concepts of linear algebra in a more abstract, coordinate-free setting. Consequently, the focus of this course will be on proofs and concepts, not on calculations. The course will cover the following topics:

- Abstract vector spaces and bases
- Linear transformations and their matrix representations
- Eigenvalues and eigenvectors
- Inner product spaces
- Applications

More information can be found below:

- **Text:** *Linear Algebra*, by Friedberg, Insel, and Spence, Fourth Edition, Prentice Hall, 2003.
- **Classes:** MW 12:45 - 2:05 PM, 110 Carnegie
- **Office Hours:** MW 2:15 - 3:15 PM or by appointment
- **Course Webpage:** <https://smwehrli.expressions.syr.edu/teaching/mat-531-spring-2019>
- **Midterm Exam:** There will be one midterm exam, which will tentatively be given on Wednesday, March 6.
- **Final Exam:** The final exam will cover the entire course and will be given on Tuesday, May 7, from 3 PM to 5 PM in 200 Carnegie. Time and location of the final exam are subject to change.
- **Homework:** Homework problems will be assigned weekly and announced on the course webpage. Working independently on the assignments will probably help you to learn the material more effectively and to do better on exams. However, you may (and sometimes should) work with others to fully understand the material. You must write your own solutions to homework problems. You are encouraged to see me for help. You should not limit your practice only to the assigned problems. Find and do other problems. You may ask about any linear algebra problems during class. In addition to problems from our text that I have not assigned, there are other sources of problems including other texts and problem books. Homework is due on Wednesdays at the beginning of class.
- **Grading:** The midterm exam will count for 30% of your course grade and the final exam for 40%. The remaining 30% will come from the homework.
- **Calculators:** Calculators will not be allowed on the exams. This includes calculators on cell phones. All electronic devices other than the calculator should be silenced and put away during class.

- **Students with disabilities:** If you believe that you need academic adjustments (accommodations) for a disability, please contact the Office of Disability Services (ODS), <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call (315) 443-4498 or TDD: (315) 443-1371 for an appointment to discuss your needs and the process for requesting academic adjustments. ODS is responsible for coordinating disability-related academic adjustments and will issue students with documented Disabilities Accommodation Authorization Letters, as appropriate. Since academic adjustments may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.
- **Academic Integrity:** Syracuse University's Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same work in more than one class without receiving written authorization in advance from both instructors. Under the policy, students found in violation are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered as described in the Violation and Sanction Classification Rubric. SU students are required to read an online summary of the University's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice. The Violation and Sanction Classification Rubric establishes recommended guidelines for the determination of grade penalties by faculty and instructors, while also giving them discretion to select the grade penalty they believe most suitable, including course failure, regardless of violation level. Any established violation in this course may result in course failure regardless of violation level. For more information and the complete policy, see <http://class.syr.edu/academic-integrity/>
- **Religious observances policy:** Syracuse University's Religious Observances Policy recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holy days according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors no later than the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice (Student Services -> Enrollment -> My Religious Observances) from the first day of class until the end of the second week of class.