Linear Algebra - Math 304

Spring 2026 -- UNDER CONSTRUCTION -- Course Coordinator: Alex Feingold

Sec	Instructor	Office	Email(*)	Meets	Room
1	Emmanuel Adara	WH-322	Adara	MWF: 8:00-9:30	CW-109
2	Sarah Lamoureux	WH-330	Lamoureux	MWF: 8:00-9:30	CW-213
3	Sarah Lamoureux	WH-330	Lamoureux	MWF: 9:45-11:15	CW-213
4	Stefan Viola	WH-326	Viola	MWF: 9:45-11:15	LN-2403
5	Stefan Viola	WH-326	Viola	MWF: 11:45-1:15	LN-2403
6	Alex Feingold	WH-115	Feingold	MWF: 1:30-3:00	CW-209
7	Tara Koskulitz	WH-326	Koskulitz	MWF: 1:30-3:00	CW-307
8	Tara Koskulitz	WH-326	Koskulitz	MWF: 3:15-4:45	WH-G002

(*): To send an email to your instructor, click on the link in the Email column of the table.

Below is a partial syllabus with information for all sections that you should know. Your instructor may have a more detailed syllabus about how your section will be run.

Textbook (Required)

Linear Algebra and Its Applications, 6/e, by Lay/McDonald, Pearson+ etext

This course is participating in Binghamton University’s Inclusive Access Program, and your access code will be delivered via the B&N Course Materials link in Brightspace.

You should not purchase access to your Pearson materials unless you have opted out of Binghamton University’s Inclusive Access Program. If you plan to opt out, please do not use the access code that was distributed to you via the B&N Course Materials link through your Brightspace course. If you plan to opt out, but cannot immediately purchase access to your course materials, please use Pearson’s Temporary Access which can be located via your link to MyLab, Mastering, or Revel. Otherwise, please follow the 2-part directions below.

(1) To get started, go to your Brightspace course, and click on the content area for the B&N Course Materials link. Navigate to the Courseware product you'd like to access and click “Reveal access code”. Write down your access code or copy & paste it into a separate word/text file.

(2) Now that you’ve acquired your access code, navigate back to your Brightspace course, and go to the Pearson Access link (MyLab/Mastering/Revel) in your Brightspace course to begin the registration process. When prompted, type in the Access Code you copied/saved and complete your registration process.

The following more detailed instructions have been provided by a Pearson representative. Images of the webpages for each step are available from a pdf file here.

Login to Brightspace and click on your MATH 304 course.

Click Course Tools → Course Materials - B&N First Day

Click Reveal Access Code

Click Copy (under Copy Code)

Navigate back to your MATH 304 course. Scroll to the bottom. Click Course Materials.

Click the Pearson link

Login to your Pearson account or Create An Account if you do not already have one

Click Access Code

Paste the access code you copied earlier and click Finish

Click Go to My Course

You have successfully enrolled in your course! Please ensure you have access to the eText and Study Plan.

Additional Textbooks and Resources (Supplemental)

Here are a few additional books that students and instructors may find helpful.

Linear Algebra by Jim Hefferon. One can access additional free resources at the textbook's official website.

A First Course in Linear Algebra by Robert A. Beezer

Elementary Linear Algebra by K.R. Matthews

Linear Algebra by D. Cherney, T. Denton, R. Thomas, and A. Waldron

There are also resources for Linear Algebra on the internet, which may supplement the textbook and homework. For example, the following link takes you to a free website with exercises and feedback on your answers: MathMatize by Jonathan Herman

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Approximate Exam Schedule (Each section instructor will decide when it is appropriate to give Exams 1, 2, 3.)

Exam 1: The week of February 16, 2026.

Exam 2: The week of March 23, 2026.

Exam 3: The week of April 27, 2026.

Final Exam: Common exam for all sections: To be announced by registrar.

Anyone with a final exam conflict must contact their instructor to make an arrangement.

Additional information about the Final Exam procedures:

You should plan to be at the exam location 15 to 20 minutes before the exam starts. You will be told when you can enter the room and where to sit. Exams will be placed on the seats spaced apart, and students from each section should be sitting together in the same area. That way you can have questions answered by your familiar instructor.

You need to bring only writing instruments (pencils and erasers are recommended). No cellphones, earbuds, smart

watches, laptops or other electronic devices will be allowed during the exam, and you may be asked to produce a university ID card to prove your identity. Students who come late will not receive any extra time at the end. Students who have accommodations from the SSD will take this exam at the University Testing Center as scheduled starting at the same time as everyone else.

Having a ride that wants to leave early is NOT a reason for missing the final exam, and will not get a make-up exam or an incomplete.

ONLY A COMPLETE CANCELLATION OF ALL EXAMS BY THE ADMINISTRATION WOULD CHANGE THESE ARRANGEMENTS.

Grades

The course total will be determined as follows:

Quizzes: 15% (Quizzes should be given approximately once per week except in weeks when an exam is given.)

Exam 1: 15%

Exam 2: 15%

Exam 3: 15%

Final Exam: 30%

MyLab Assignments (Common for all sections): 10%

Important: To truly master the material in the course, it is recommended that in addition to the assigned MyLab problems, you should do additional exercises at the end of each section. These will not be graded, but they could be important to your success in the course.

Quizzes are important for students to keep up with the progress of the course and to provide timely feedback on how the material is being absorbed. By ``Assessment Day" enough quizzes should have been taken to evaluate each student's progress and make a risk assessment for early warning about problems.

At the end of the course, your grade in the course will be determined by your instructor based on your course total and the following approximate scale. (Borderline cases will be decided by other factors such as attendance or participation.)

A 90%, A- 85%, B+ 80%, B 75%, B- 70%, C+ 65%, C 60%, C- 55%, D 50%

Health and Safety Procedures Due to COVID Pandemic

Binghamton University follows the recommendations of public health experts to protect the health of students, faculty, staff and the community at large. Safeguarding public health depends on each of us strictly following requirements as they are instituted and for as long as they remain in force. Health and safety standards will be enforced in this course.

Current rules make face coverings optional, but when they are worn, they should completely cover **both the nose and mouth** while indoors (unless they are eating or alone in a private space like an office). A face shield is not an acceptable substitute. Classroom safety requirements will continue to be based on guidance from public health authorities and will be uniformly applied across campus. If these requirements change, a campus-wide announcement will be made to inform the University.

Expected workload

You are expected to spend about 12.5 hours per week on average for this class, including in-class lectures, watching instructional videos, solving homework problems (graded and ungraded), reviewing the material, and preparing for the tests. Expect the work load to be higher than average in the weeks before the exams.

Expected behavior in class

During classes all students are expected to participate in a way that maximizes their learning and minimizes disruptions for their classmates. If you have any concerns, limitations, or circumstances, please communicate with your instructor to find the most appropriate solution.

Academic Code of Honor

For all graded assignments and exams, you are not allowed to use any help not explicitly authorized by your instructor. This includes, but is not limited to, problem-solving websites, notes, help from other people, ChatGPT or other AI programs, etc. All instances of academic dishonesty will be investigated, penalized, and referred to the appropriate University officials for maximal possible punishment. **Cheating will not be tolerated.**

Getting Help

If you fall behind in class, or need extra help to learn the material, talk to your instructor as soon as you can. They should be able to help you and also point you to other resources. We also encourage you to talk to your classmates, and, in particular, to form informal study groups to prepare for the exams.

Disability Information

If you have a disability for which you are or may be requesting an accommodation, please contact both your instructor and the Services for Students with Disabilities office (SSD) (119 University Union, 607-777-2686) as early in the term as possible. Note: extended time for the examinations usually requires special scheduling at the University Testing Center (UTC), and must be arranged by your instructor.

Topics Corresponding to Chapters in our Textbook

Some instructors may follow the textbook more closely than others. Instructors who use their own lecture notes may have exams with different contents than the topics listed below. Be sure to listen to your instructor so you

know what topics will be covered on your section exams. Only the final exam will be a common exam for all sections.

Topics for Exam 1	Chapter
Systems of Linear Equations	1.1
Row Reduction and Echelon Forms	1.2
Vector Equations	1.3
Matrix Equations	1.4
Solution Sets of Linear Systems	1.5
Linear Independence	1.7
Linear Transformations	1.8
Standard Matrix for a Linear Transformation	1.9
Matrix Operations	2.1
Invertible Matrices	2.2
Invertible Matrix Theorem	2.3
Topics for Exam 2	
Determinants	3.1
Properties of Determinants	3.2
Applications of Determinants (Not responsible for Cramer's Rule or Adjugates)	3.3
Abstract Vector Spaces	4.1
Fundamental Subspaces	4.2
Bases	4.3
Coordinate Systems	4.4
Dimension	4.5
Change of Basis Matrices	4.6
Topics for Exam 3	
Eigenvalues and Eigenvectors	5.1
Characteristic Equations	5.2
Diagonalization	5.3
Matrix for a Linear Transformation	5.4
Complex Eigendata	5.5
Inner Products	6.1
Orthogonal Sets	6.2
Orthogonal Projections	6.3
Gram-Schmidt	6.4
Additional Topics	
Inner Product Spaces	6.7
Symmetric Matrices	7.1

Syllabi from previous semesters

The syllabus for Math 304 in Fall 2025 is available through this link:

Fall 2025 page

The syllabus for Math 304 in Spring 2025 is available through this link:

Spring 2025 page

The syllabus for Math 304 in Fall 2024 is available through this link:

Fall 2024 page

The syllabus for Math 304 in Spring 2024 is available through this link:

Spring 2024 page

The syllabus for Math 304 in Fall 2023 is available through this link:

Fall 2023 page

The syllabus for Math 304 in Spring 2023 is available through this link:

Spring 2023 page

The syllabus for Math 304 in Fall 2022 is available through this link:

Fall 2022 page

The syllabus for Math 304 in Spring 2022 is available through this link:

Spring 2022 page

The syllabus for Math 304 in Fall 2021 is available through this link:

Fall 2021 page

The syllabus for Math 304 in Spring 2021 is available through this link:

Spring 2021 page