

MATH 34600L (43597) **Elements of Linear Algebra**

Spring, 2024 Tuesday, Thursday 9:30 am– 10:45 am NAC 6/121

Book: W. Keith Nicholson, *Linear algebra with Applications (Open edition)*, Lyryx, 2021 (Revision A). A free pdf is obtainable from the publisher at the following link:

<https://lyryx.com/wp-content/uploads/2018/01/Nicholson-OpenLAWA-2018A.pdf>

One can also order a (large) paperback copy of the book. I recommend getting it because it is not very expensive and it is easier to navigate than is the pdf. There is a color version and a slightly cheaper black and white version. See the links below:

Color: <https://www.lulu.com/shop/w-keith-nicholson/linear-algebra-with-applications/paperback/product-4dqe7p.html?page=1&pageSize=4>

B&W: <https://www.lulu.com/shop/w-keith-nicholson/linear-algebra-with-applications/paperback/product-7dn5rw.html?page=1&pageSize=4>

Syllabus:

Chapter 2, Matrices: 2.1-2.6

Chapter 1, Systems of Linear Equations: 1.1-1.3

Chapter 3, Determinants: 3.1, 3.2, 3.6

Chapter 6, Vector Spaces: 6.1-6.4

Chapter 7, Matrix of Linear , Linear Transformations: 7.1-7.3

Chapter 9, Matrix of Linear Transformation, Diagonalization: 9.1, 3.3, 3.5

Chapter 8, Orthogonality and Symmetric Matrices: 8.1, 5.6, 8.2, 8.6

The classes will use slides that I have prepared. These slides will be posted on my website:

https://math.sci.ccny.cuny.edu/people?name=Ethan_Akin

Also posted there will be this class information document and the syllabus with the list of homework problems from the book. I will be collecting and recording the homework.

Grading: There will be three in-class tests during the term. The term average, which will count for 55% of the grade, will be computed from these with an adjustment of 5% for the cumulative homework grade. The final exam will count the remaining 40% of the grade. You should be warned that there are no makeups. If you have missed work with a legitimate reason, the remaining work will simply be counted more heavily.

Office Hours: Tuesdays, 11:00am – 1:00pm, Thursdays 11:00am – 12:00.

Ethan Akin, Mathematics Department

Office: Marshak 325

Email: eakin@ccny.cuny.edu

Phone: 650-5136