



Course Announcement for Spring 2019
Math 524 – Graduate Linear Algebra (3 credits)

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Linear algebra is fundamental to virtually every field of advanced mathematics. This course is designed to build on the standard sophomore level linear algebra course. It will not only provide a rigorous review of the usual undergraduate curriculum, but will also introduce some more advanced topics. These may include **dual spaces, quotient spaces, canonical forms, adjoint maps, singular values**, and/or **quadratic forms**.

Not only should this class provide a foundation for your chosen research field, but it will also serve as good preparation for the linear algebra portion of UM's algebra preliminary exam.

Intended audience/prerequisites: This course is designed to be useful to every graduate student as well as to advanced undergraduates. Students should have experience writing careful mathematical proofs.

Text: *Linear Algebra*, by Peter Petersen.

This text can be downloaded for free through the Mansfield Library.