Syllabus MA 5627: Numerical Linear Algebra

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Lectures: WMF 1:05–1:55 PM, 327B Fisher Hall
Office Hours: MWF 2:05–2:55 PM and by appointment

Prerequisites: Introductory course in linear algebra and programming experience, or consent of instructor.


Contents: Topics covered include:
Basic concepts, singular value decomposition, QR factorization and least-squares, conditioning and stability, systems of equations, eigenvalue problems, iterative methods.

Computing: Access to one of the computing environments such as Matlab, MathCad, Mathematica, Python, etc. is required in order to do the homework assignments.

Course Grade: The course grade will be based on periodically assigned homework (50%) and a final exam (50%).

Additional References:


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