MATH 405 **Linear Algebra** TTh 12:30–1:45
Section 0101 MTH B0421
Spring, 2016 C. Laskowski

Office: MTH 3312 **Phone:** (301) 405-5336 **email:** mcl@math.umd.edu
Hours: Wed 10-12, or by appointment.
Class webpage: www.math.umd.edu/∼mcl/405/Spring16/index.html

This course gives a formal treatment of finite dimensional vector spaces and linear transformations between them. Topics include linear independence, dimension, inner products, orthogonality, duality, eigenvectors, and canonical forms (both rational and Jordan). Whereas many of these notions were introduced in earlier linear algebra courses specifically for $\mathbb{R}^2$ or $\mathbb{R}^3$, they are explored here in greater depth and in much more generality.

Text: Linear Algebra, An Introductory Approach by Charles Curtis.

Format: Math 405 meets two times a week. You are expected to attend every class. Attendance will not be taken, but you are responsible for all material covered in class. Please be aware that some of the material of the course may not appear in the text.

Homework: Doing the homework exercises is where most of the learning will occur! During the term, there will be 11-12 homework sets. Only your top 10 homework scores will be used in computing your course grade.

In-class Exam: There will be one in-class exam on Thursday, March 10.

Take-home Exam: There will be one Take-home exam that is due on the last day of class, Tuesday, May 10, at 12:30pm. It is expected that you do the Take-home exam on your own, and not in collaboration with others.

Final Exam: The Final Exam will be on Tuesday, May 17, 1:30–3:30.

Grading: Course grades will be based on homework sets, the In-class exam, the Take-home exam, and the Final exam. There are 500 points possible (100 from HW; 150 for both the In-class exam and the Take-home exam; and 100 for the Final exam). 90+% is a guaranteed A, 80+% guaranteed at least a B, 70+% at least a C, etc. It is possible that the cutoffs may be lowered at the discretion of the professor.

DSS: If you have a recognized disability, we are pleased to discuss academic arrangements with you. Please discuss this with me as early in the term as possible.

Academic Integrity: Students are expected to abide by the Honor Code and Honor Pledge, see www.president.umd.edu/policies/docs/III-100A.pdf