**Spring 2019 Linear Algebra 3450:312**

**INSTRUCTOR:** Dr. Stefan Forcey EMAIL: sforcey@uakron.edu
**OFFICE:** CAS 275 PHONE: 972-6779

**OFFICE HOURS:** M 11:15am-12:30pm, WF 1:15pm-2:30pm. Lots more by appointment!

**Text and Coverage:** "Introduction to Linear Algebra with Applications." DeFranza and Gagliardi, University of Akron Custom Edition.

**Website** for schedule, homework problems and announcements:
http://www.math.uakron.edu/~sf34/class_home/linear/linears19.htm

## Learning Outcomes for 3450:312 Linear Algebra

Students are expected to be able to

- Determine if a set of vectors is linearly independent
- Represent systems of linear equations using matrices and solve such systems
- Find bases and dimensions of vector spaces
- Determine properties of matrix transformations
- Find eigenvalues and eigenvectors for given matrix
- Write elementary proofs

**GRADING POLICY**:

• The quiz/homework average will be calculated by dropping a total of 15 raw points which means that I'll calculate your percentage by first adding up to 15 points back on to your raw score, limited by the maximum number of hw/quiz points possible.

• No test may be taken early or late. The final total test score will use the 2 highest of 3 percentages: 2 percentage test grades and the final exam percentage grade. This will have the effect of allowing one missed test to be replaced by the final exam.

• 1000 course-points possible. For each of the categories the fraction of course-points you receive is the same fraction that you earn out of the total possible raw score. So if you get a 49 out of 50 on Test 1 then you earn (49/50)*200 = 196 course-points.

300 pts: Homework, quizzes (30%)
400 pts: 2 Tests at 200 pts each. (40%)
300 pts: Final Exam (30%)

900 pts. guarantees an A
800 pts. guarantees a B
700 pts. guarantees a C
600 pts. guarantees a D
(+,- at my discretion)

**Course Outline:**

• Jan. 15: Day one.
• Jan. 21: No class on MLK day.
• Chapter 1: Systems of Equations and Matrices
• Chapter 2: Linear Independence
• Jan. 27: Last day to drop.
• Chapter 3 : Vector Spaces
• **TEST 1.**
• Mar. 3: Last day to w/draw.
• Chapter 4: Linear Transformations
• Chapter 5: Eigenvalues
• **TEST 2.**
• Mar. 25-29: Spring break.
• Chapter 6: Inner products
• May 2: Last day.
• Final Exam Thursday May 9, 2:30-4:30pm Leigh 408

• **No notes, formula sheets or books may be used on the any test or the final exam.**

Homework may not be copied, but collaboration and research are allowed. All other work is individual. Any incidence of academic dishonesty carries a minimum penalty of a non-removable zero for that work. No active cellular phones, pagers, media players, computers or other electronic communication devices are permitted during the test.