# SYLLABUS FOR MATH 4242 APPLIED LINEAR ALGEBRA

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## Time and Location

MWF 9:05-9:55, Vincent Hall 6

#### Textbook

P. Olver & C. Shakiban, Applied Linear Algebra, Prentice Hall.

#### Office Hours

Monday 11:00am-12:00pm, 2:00pm-3:00pm, Wednesday 2:00pm-3:00pm

#### Course materials

A course website will be set up at my homepage (under construction and will be ready during the first week of class.)

### Homework and Exams & Grading

There will be two (in class) midterm exams and one final exam. There will also be weekly homework, starting from week two. The last homework will not be collected. Three lowest homework grades will be dropped. Homework will be assigned at the beginning of the week and collected next Wednesday. Makeup midterms will only be given to students unable to attend the midterms with valid reasons, with approval from the instructor prior to the exam. Homework accounts for 20% of total score, each midterm 20%, and the final 40%.

## **Description of Course**

This is a one semester in-depth study of linear algebra. Basic knowledge about vectors, matrices and determinants will be assumed. Topics include Gauss eliminations, Orthogonality, Linear Transformations, Eigenvalues and Stability of Ordinary Differential Equations, and Iteration of Linear Systems.

#### Important Dates

Wednesday October 4, First Midterm; Wednesday November 8, Second Midterm; Tuesday December 19, 1:30-3:30, Final