$$\det\begin{pmatrix} \text{Fall 2013} & 0 & 0 & 0 \\ 0 & \text{Math 309} & 0 & 0 \\ 0 & 0 & \text{Matrix Algebra} & 0 \\ 0 & 0 & 0 & \text{Syllabus} \end{pmatrix}$$
$$= \text{Fall 2013 Math 309 Matrix Algebra Syllabus}$$

Basic Information

When:
- Section 01: MWF 11am-12pm
- Section 02: MWF 1-2pm

Where:
- Section 01: Rebstock 215
- Section 02: Busch 100

Syllabus: `http://math.wustl.edu/~geknese/math309-fall2013.pdf`

About the Instructor

Instructor:	Greg Knese (pronounced like "niece")
Office:	Room 211A Cupples I
Office hours:	M 2:30-3:30pm, Tu 10:30-11:30am, Th 1:30-2:30pm by appointment, or just drop by.
Office phone:	935-8614
Email:	`geknese@wustl.edu`

About The Course

An introductory course in linear algebra that focuses on Euclidean n-space $\mathbb{R}^n$, matrices and related computations. Topics include: systems of linear equations, row reduction, matrix operations, determinants, linear independence, dimension, rank, change of basis, diagonalization, eigenvalues, eigenvectors, orthogonality, symmetric matrices, least square approximation, quadratic forms. Introduction to abstract vector spaces. Prerequisite: Math 132

Textbook

Linear Algebra and its applications 4^{th} edition by David C. Lay. ISBN-10: 0321385179 ISBN-13: 9780321385178.

I hope to cover sections: 1.1-1.9, 2.1-2.3,2.7, 3.1,3.2, 4.1-4.7, 4.9, 5.1-5.5, 5.7, 6.1-6.5, 7.1,7.2.

Exams

Cumulative Exam 1:	October 9, 7-9pm	location TBA
Cumulative Exam 2:	November 6, 7-9pm	location TBA
Cumulative Final:	December 12, 8-10am	location TBA

Homework

- Online homework through WeBWorK is typically due Tuesdays at 11:59pm. Go to:
  `http://webwork.wustl.edu`
- Written homeworks will typically be due on Fridays and handed in in class. These should be written up or typed nicely using complete sentences as much as possible. Write as if you are explaining to a fellow student. These problems will be posted on blackboard.

Grade calculation

Exam 1:	15%
Exam 2:	15%
Final exam:	40%
WeBWorK:	15%
paper HW:	15 %

Letter grades

No worse than:

A+	[97,∞)	B+	[87,90)	C+	[77,80)	D+	[67,70)	F	$(-\infty, 60)$
A	[93.5, 97)	B	[83.5, 87)	C	[73.5,77)	D	[63.5, 67)		
A-	[90, 93.5)	B-	[80,83.5)	C-	[70,73.5)	D-	[60,63.5)		

Academic integrity

- Exams: no notes, phones, calculators, or other aids are permitted in exams. Computations will be designed to be easy.
- Homework: discussing homework with fellow students is permitted, but all homework must be written up (or entered into webwork) **independently**. Suggestion: after discussing a problem with someone else throw away anything that was written down during the discussion and go off on your own to record what you have learned.

Useful links

- Wolfram alpha: `www.wolframalpha.com`
- Free math program Sage: `www.sagemath.org`
- Free linear algebra book: `http://joshua.smcvt.edu/linearalgebra/`