

FINISHED MATH 35100?

SPRING 2015

MATH 35300 (CLASS NUMBER 11209):

LINEAR ALGEBRA II WITH APPLICATIONS

TU TH 12:00 – 1:15

**MACHINE COMPUTATION
APPLICATIONS
THEORY**

**MORE
Linear Algebra!**

**GAMBLER'S RUIN &
DISCRETE MARKOV CHAINS
LEAST SQUARES ESTIMATION
ORTHOGONALITY & PROJECTIONS
APPLICATION TO COST ACCOUNTING
MORE EIGENVALUES & EIGENVECTORS
THE JORDAN CANONICAL FORM THEOREM
SYSTEMS OF LINEAR DIFFERENTIAL EQUATIONS
HERMITIAN MATRICES & THE SPECTRAL THEOREM**

LINEAR ALGEBRA IS ONE OF THE MOST APPLICABLE AREAS OF MATHEMATICS, BUT ONLY SINCE THE DEVELOPMENT OF DIGITAL COMPUTERS HAVE THE APPLICATIONS BLOSSOMED. LINEAR ALGEBRA ALSO HAS A RICH THEORETICAL HERITAGE AND THIS COURSE WILL INCLUDE BOTH ASPECTS. FURTHERMORE, THE COURSE WILL INCORPORATE MACHINE COMPUTATION (USING *MATLAB*®) INTO THE HOMEWORK AND SOME PARTS OF THE TESTS. FOR MORE INFORMATION, CHECK

www.math.iupui.edu/~ccowen/Math353.html

**Math 351 & 353 are a
'two course sequence' for the Pure Math
and the Applied Math options!**