

MAT 485
Differential Equations and Matrix Algebra for Engineers

Course Information

- Course Chair:** Dr. G. C. Verchota, Professor of Mathematics
229A Physics Bldg.
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- Text:** *Differential Equation & Linear Algebra (Second Edition)*
by Farlow, Hall, McDill, and West
Published by Prentice Hall
- Prerequisites:** MAT 397.
Credit cannot be given for both MAT 485 and MAT 514 or for both MAT 485 and MAT 331.
MAT 485 does not count towards mathematics major, and students in CIS should not take it.
- Learning Goals:** This course introduces students to ordinary differential equations and linear algebra. In particular, we shall cover the following topics: first order ODEs, separable equations, second order ODEs, higher order linear ODEs, systems of ODEs, determinants, linear systems, inverse of a matrix, eigenvalues & eigenvectors.

Students who are in need of disability-related academic accommodations must register with the Office of Disability Services (ODS), 804 University Avenue, Room 309, 315-443-4498. Students with authorized disability-related accommodations should provide a current Accommodation Authorization Letter from ODS to the instructor and review those accommodations with the instructor. Accommodations, such as exam administration, are not provided retroactively; therefore, planning for accommodations as early as possible is necessary. For further information, see the ODS website, [Office of Disability Services](http://disabilityservices.syr.edu/) <http://disabilityservices.syr.edu/>