Syllabus

Instructor: Dr. F. X. Tanner
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Lectures: MWF 04:05–04:55, 231 Fisher Hall
Office Hours: MWF 03:05–03:55 pm and by appointment

Prerequisites: Introductory course in linear algebra, elementary differential equations and multi-variable calculus, or consent of instructor.


Contents: Topics covered include:
Ordinary differential equations and dynamical systems via a modern geometric approach including topics such as phase planes, limit cycles, bifurcations, Lorenz equations, fractals, strange attractors.

Computing: Access to one of the computing environments such as Matlab, MathCad, Mathematica, Maple etc. is required in order to do some of the homework assignments.

Course Grade: The course grade will be based on periodically assigned homework (50%) and a final exam (50%).
The scale is the straight percentage scale:
$A \geq 90\%$, $AB \geq 85\%$, $B \geq 80\%$, $BC \geq 75\%$, $C \geq 70\%$, $CD \geq 65\%$, $D \geq 60\%$, $F < 60\%$

Additional References:


