Course Announcement – Spring 1998

Math 242 – Elementary Differential Equations
Professors Miller (Section 1) and Meade (Section 3)

	Section 1 (schedule code: 204838)	Section 3 (schedule code: 204878)
Professor	Matt Miller	Doug Meade
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Meeting Time	MWF 9:05 – 9:55	TTh 11:00 – 12:15
Text	*Differential Equations*, Blanchard, Devaney, & Hall, Brooks/Cole, 1998	

Course Description

Sections 1 and 3 of Math 242 will be taught using the new Blanchard, Devaney, and Hall text from Brooks/Cole. The selection of this textbook was based largely on its unique and exciting approach to differential equations and their applications. For example, instead of concentrating almost exclusively on methods that produce closed-form solutions, the primary emphasis is on qualitative, geometric, and numerical techniques for the analysis of differential equations. This approach facilitates an in-depth discussion of systems and nonlinear models with an emphasis on phase-plane analysis and questions concerning stability.

Specific skills that will be developed in this course include an understanding of the geometry of solutions to differential equations, the ability to work with multiple representations of solutions, techniques for the construction and analysis of models of physically realistic situations, and the ability to communicate qualitative behavior of solutions in writing.

This course will be taught in the new student computer facility in the Department of Mathematics (LC 303A, a networked PC lab). Students will be introduced to, and expected to learn to use, Maple. Maple is a computer algebra system that is particularly well-suited to the approach used with this text, and is available in all of the science and engineering computer labs on campus.

Additional information (including this document) can be found on the WWW. To access this information, point your browser to the URL

`http://www.math.sc.edu/~meade/math242-S98/`