



The University of
Montana

Department of Mathematical Sciences
Fall 2011, Math 317
Ordinary Differential Equations Lab

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Office Hours: M 2-3, T 10-11, W 10-11, F 12-1

Course Description: This lab is a companion to Math 311, and if you are in it you are either concurrently enrolled in 311, or took it recently. We will cover topics in the Applications sections in the text listed below. I will do examples using Maple in the lab, but you are welcome to use Matlab or Mathematica if you prefer, and are reasonably proficient with it. The labs will illustrate topics covered in the text, and assume only a basic knowledge of computer systems (namely Windows, the OS that runs in the lab). You can purchase Maple for your own computer at the bookstore, but you must come to the lab to make sure you get all the information required for doing the investigations.

Text: • *Ordinary Differential Equations: Computing and Modeling*
Edwards and Penney, 4th Ed., Pearson Education, Prentice Hall

Prerequisite: Math 251

Important Dates:

Sept. 5:	Labor Day Holiday - no classes
Sept. 19:	Last day to drop/add via Cyberbear
Oct. 31:	Last day to drop classes/change sections with form
Nov. 11:	Veteran's Day Holiday - no classes
Nov. 24-25:	Thanksgiving Day Holiday - no classes
Dec. 9:	Last Day for Drop Petitions

Lab Assignments:

Each lab will cover topics in one application section in the text book. You will perform the investigations for that section using Maple (unless otherwise arranged). You will hand-in your annotated Maple worksheet either via email or hard copy before the meeting time for the next lab. *Labs up to 1 day late will receive a 10% deduction, up to 2 days late, a 25% deduction, up to 3 days late, a 50% deduction. Labs will not be accepted any later than 3 days past the due date.*

Grading:

Each lab is worth 10 points. From the total number of points possible for the course, grades will be assigned on the usual percentage scale, 90-100% A, 80-89 B, etc.