Instructor:	William A. Adkins
	350 Lockett Hall
	Tel: 578-1601
	E-mail: adkins@math.lsu.edu
	Class Web Site: `http://www.math.lsu.edu/~adkins/m2065.html`
Office Hours:	9:30 - 10:30 MWF; 1:00 - 2:00 Noon TTh
	Other times by appointment

Text

Ordinary Differential Equations by W. A. Adkins and M. G. Davidson, Springer 2012. (ISNB 978-1-4614-3617-1) At `http://link.springer.com.libezp.lib.lsu.edu/book/10.1007%2F978-1-4614-3618-8` an e-book version of the text can be downloaded by LSU students through the LSU library. You will need to log on to your MyLSU account to access this link. A student's solution manual can be downloaded from the Springer.com website for the text: `https://www.springer.com/us/book/9781461436171`

Syllabus

This is an introductory course in ordinary differential equations with a particular emphasis on linear differential equations. A nuance of the present course is an early introduction of the Laplace transform into the theory, and then subsequently using the Laplace transform to extract much of the basic information about constant coefficient linear ordinary differential equations in an expedited manner. The sections of the text that we will cover are:

Chapter 1: 1.1–1.6
Chapter 2: 2.1–2.8
Chapter 3: 3.1–3.4, 3.6
Chapter 4: 4.1–4.3
Chapter 5: 5.1–5.3, 5.5, 5.6
Chapter 6: 6.1–6.5
Chapter 8: 8.1–8.4
Chapter 9: 9.1–9.4

Examinations

There will be 4 in-class exams and a 2-hour final examination. Exam dates are:

Exam 1	September 14
Exam 2	October 12
Exam 3	November 2
Exam 4	November 26
Final Exam	Dec 6 (Thursday) 7:30 - 9:30 AM

Quizzes

There will be 10-15 minute quizzes given on an irregular basis. *There will be no make-ups for missed quizzes.*

Grade

A grade curve for each exam will be determined at the time of the exam. Additionally, a grade curve will be determined for the cumulative total of all quizzes. The raw score on each exam will be translated to a number T between 0 and 100 by the following procedure, which is best illustrated by means of a numerical example. Suppose, as an example, that the exam has a total possible of 75 points and the grade curve is given by the table:

A	$66 - 75$
B	$56 - 65$
C	$47 - 55$
D	$38 - 46$
F	$0 - 38$

Suppose your raw score on the exam was 52, which would be a **C** on the above curve. Just linearly interpolate the interval $[47, 56]$ to the interval $[70, 80]$, which is the standard range for **C** on the 10 point scale. Thus, 52 is interpolated to

$$70 + 10 \times \frac{52 - 47}{56 - 47} = 76.$$

Thus, the normalized score T would be 76. Note that this is not the same as the percentage, which would be 69% in this case. As another example, the raw score 72 (an **A**) would be normalized to the score

$$T = 90 + 10 \times \frac{72 - 66}{75 - 66} = 97.$$

The raw and the normalized scores will be given to you on each exam at the time it is returned.

The course grade is computed from a weighted average of the normalized scores on the four exams, the quizzes and the final exam. If T_1, T_2, T_3 and T_4, denote your normalized scores on the 4 in-class exams, Q denotes your normalized score on the quizzes (and attendance), and E denotes your normalized final exam score, then your score G for the course is determined by the formula:

$$G = .20(T_1 + T_2 + T_3 + T_4 - \min(T1, T2, T3, T4)) + .10Q + .30E.$$

Thus, the three highest scoring exams (after normalization) each counts 20%, the quizzes count 10%, and the final exam counts 30%. The number G will then be translated into the course letter grade by the scale:

A+	$G \geq 97$
A	$93 \leq G < 97$
A-	$90 \leq G < 93$
B+	$87 \leq G < 90$
B	$83 \leq G < 87$
B-	$80 \leq G < 83$
C+	$77 \leq G < 80$
C	$73 \leq G < 77$
C-	$70 \leq G < 73$
D+	$67 \leq G < 70$
D	$63 \leq G < 67$
D-	$60 \leq G < 63$
F	$G < 60$

Homework

Homework is assigned daily, but will not be collected and graded. Doing the homework exercises as they are assigned, and seeking help (preferably from me) for those that give you difficulty, is the best strategy for a successful completion of the course. The homework assignments and any supplemental materials for the course will be posted at `http://www.math.lsu.edu/~adkins/m2065.html`. *You should check this website regularly for the assignments and any supplemental materials.*