

Errata for Differential Equations

January 17, 2002

Chapter 2

Page 22. In Exercise 11, delete the 11).

Near the bottom of page 33 the final sentence of the subsection should read " and frequency ω ."

Chapter 3

Page 64 Exercises 20 and 21: switch $\sin(t)$ and $\cos(t)$.

Chapter 4

Middle of page 85, replace $\{\phi_1(x), \dots, \phi_n(x)\}$ by $\{\phi_1(t), \dots, \phi_n(t)\}$.

Section 3 bottom of page 95, the expressions should read

$$t^k e^{(a \pm bi)t} = t^k e^{at} \cos(bt) \pm it^k e^{at} \sin(bt).$$

Page 114, remove the 16) in Exercise 16.

Chapter 5

Page 134, $Y_1(t)$ should read

$$Y_1(t) = e^t \begin{bmatrix} \cos(t) \\ -\sin(t) \end{bmatrix}$$

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Chapter 8

Bottom of page 236, remove the minus sign on the second integral.

In Example 8.5.3 the last fraction should be $\frac{1}{s+(1/5)}$.

Chapter 9

Page 269. In Exercise 3, $4u_{xx} = u_t$ should read $u_{xx} = u_t$.

Appendix A

Page 401. $x_1 = 2/7$ and $x_2 = -10/7$.

Page 438, section 2.2 – 1. $k_3 = -0.0988$.

Page 442, section 4.4.1 – 5. Change e^t to e^{2t} in 5.

Appendix E

Page 449, 8.1, 11. $\hat{f}(s) = \frac{-3e^{-2s}}{s} + \frac{1-e^{-2s}}{s^2}$ should read $\hat{f}(s) = \frac{-2e^{-2s}}{s} + \frac{1-e^{-2s}}{s^2}$.

Page 450, 8.5, 3. Replace 4 by -4 .

Page 450, 8.5, 9. The particular solution should be $y_p(t) = u_5(t)[1/4 - t/2 + 4e^{5-t}/3 + 11e^{2(t-5)}/12]$