

**Errata for “Partial Differential Equations”, AMS Press
Second printing of Second Edition (2015)
by Lawrence C. Evans**

These correct mistakes present in the second printing of the second edition. Owing to the pandemic, I have been late in posting the latest corrections.

Last modified: May 13, 2024.

CHAPTER 1

page 2, line -13: Add “Let k be a positive integer.”
page 3, line -1: Change to “ $u_t + \sum_{i=1}^n (b^i u)_{x_i} = 0$.”

CHAPTER 2

CHAPTER 3

page 125, line 9: Change to “proof of Lemma 2”
page 132, line 5: Change “C.4” to “C.5”
page 150, line 10: Change “C.4” to “C.5”
page 151, line -7: Change to “ v_{xx}^ϵ ”
page 156, line 6: Add “Assume $L = F^*$ is smooth and uniformly convex.”
page 162, line -8: Add “where $\cdot = \frac{d}{ds}$.”
page 162, Problem 6(b). This should say:
Show that $u(x, t) = g(\mathbf{x}(0, x, t))J(0, x, t)$ solves

$$\begin{cases} u_t + \operatorname{div}(u\mathbf{b}) = 0 \\ u = g. \end{cases}$$

CHAPTER 4

page 195, line 1: Change to “ $h, g, Dg \in L^2$ ”

CHAPTER 5

page 266, line 17: Change “C.4” to “C.5”

CHAPTER 6

CHAPTER 7

page 449, line -5: Change U_T to $U \times (0, \infty)$.

CHAPTER 8

page 473, line -7: Change to "... is unique, provided $I[u] < \infty$."

page 478, line 3: Change to "... is unique, provided $I[\mathbf{u}] < \infty$."

page 515, line 12: Change DL_p to $D_p L$.

page 528, line 12 Change to "349-381"

CHAPTER 9

page 544, line -9: Should be " $= -\lambda b(Du)$ "

CHAPTER 10

To avoid notational confusion, make the following changes in the proof of Theorem 3:

page 603, line -5: Change to " $x = x_0 - hw$ "

page 603, line -4: Change v to w

page 603, line -3 Change to " $x_0 - hw$ " and " $L(w)$ "

page 603, line -1 Change to " $Dv(x_0, t_0) \cdot w - L(w)$ "

page 604, line 1 Change v to w

page 604, line 4: Change v to w

page 604, line -11: Change to " $x_1 = x_1(h)$ "

CHAPTER 11**CHAPTER 12****APPENDICES, INDEX, REFERENCES**

page 711, line 6: Change "nonnegative" to "nonnegative definite"

page 740, line 20: Should be "Temam"

Thanks to M. Cwikel, D. L. Duong, J. Edward, T. Yao, Z. Xu, S. Dai, N. Maddah, R. Ribeiro, J. Sbierski, T. O. Sorensen, B. Sweeney and Zhen Guan for finding mistakes and suggesting corrections.

Please let me know about any other errors you find, at evans@math.berkeley.edu.