

MATH 673 (AMSC 673): Partial Differential Equations I
Department of Mathematics, UMCP
Handout: MATERIAL OF MATH 673 FOR PDE QUAL EXAM

Fall 2010

The main textbook is L. C. Evans, Partial Differential Equations, AMS, 2002 (reprinted) or 2008. The following list of topics refer to this text.

Chapter 1: Left to the reader. (It is assumed you know basic definitions).

Chap. 2: All sections (2.1-2.4) are *important*.

Chap. 3: 3.1: optional, not important; 3.2: *important*; 3.3: good to read, especially secs. 3.3.1, 3.3.2 as were done in class; 3.4: *important* except: proof of Theorem 3 (sec. 3.4.3) and 3.4.5 (long-time behavior).

Chap. 4: No part of this chapter is required for the PDE Qual Exam.

Chap. 6: Sec. 6.4 (Max. principles) is *important*.