

PMATH 911 Topics in Mathematical Logic: **Stability Theory**

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Winter 2013 TuTh 1:30–2:50 MC 5045

While this course is intended as a follow-up to the Model Theory and Set Theory course (PMATH 733) that I taught in the Fall of 2012, it is open to all graduate and undergraduate students who have some familiarity with first-order logic.

Prerequisites. First-order languages and structures, Tarski's truth and satisfaction, theories and their models, the compactness theorem, elementary equivalence and elementary substructures. All this material is covered in chapters 4 and 5 of the course notes to PMATH 733.

Objectives. Chapters 7 through 10 of the PMATH 733 course notes constitute the bulk of the material I intend to cover. This includes types and saturation, nonforking, Morley rank, ω -stability and ω -stable groups.

Textbook. None. The above mentioned lecture notes are available from Media.doc in MC 2018 for \$13.02.

Reference book. Model theory: An Introduction by D. Marker, Springer, New York, 2002.