

**Spring 2016, MATH80520 Topics in Mathematica
Logic:**

Model theory of Valued Fields

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In this course we will study model theoretic properties of valued fields, e.g. completeness, model completeness, quantifier eliminations.

We will consider p -adically closed fields, algebraically closed valued fields, real closed valued fields.

We will also consider more advanced topics such as tropical geometry, motivic integration.

Prerequisites: Basic knowledge of model theory and algebra.