

MATH 80520, TOPICS in MATH LOGIC II Spring 2014

We will do a nonstandard course in computability theory and reverse math. We will start exploring models of PA- and RCA focusing on induction and bounding. Then we will move to Scott's Sets and models of Weak Konig Lemma. We will discuss the subsystems ACA₀ and ATR₀. Then we will explore Ramsey's Theorem and a few other combinatorial theorems within this context. The interest of the class and instructor will determine how we travel though this material.