Topics in Mathematical Logic II Reverse Mathematics and Computability of Combinatorial Principles Prof Cholak Spring 2018 MW 12:30–1:45 Hayes Healy Center 125

We will discuss the reverse mathematics and computability of combinatorial principles. Mainly focusing on Ramsey's Theorem for pairs, Weak König's Lemma, DNR, COH and other principles that follow from Ramsey's theorem of pairs with 2 colors. For the first half or so we will follow Hirschfeldt's book "Slicing the truth". The remaining half we will work through a number of recent papers. We will also discuss Weihrauch reducibility and a number of other related reducibilities. There is likely to be a few homework problems throughout the semester. For details about the class please see Prof. Cholak.