

FALL 2016

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MATH 80510-01: Topics in Logic

This course will be an introduction to descriptive set theory. Descriptive set theory is a branch of logic with important connections to model theory and computability, and with group theory, topology, and real analysis. The course will start from scratch, introducing the Borel sets, Polish spaces, and Polish groups. We will discuss games, and we will prove the determinacy of Borel games. We will then focus on equivalence relations and classification problems.