Abstract: Based on eight years of teaching experiments both in laboratory and whole-class settings, we (Dr. Kyeong Hah Roh and I) have developed a novel approach to teaching logic for introduction to proof courses. We proceed from constructing property-based set relationships, to a theory of statements rooted in set-theory, to basic proof structures (direct, contrapositive, and biconditional). By focusing on sets throughout, we maintain students’ fundamental intuition that statements and proofs refer to objects, not to mere truth values. By comparing and contrasting statements and proofs, we build the logical structures on students’ existing reading competencies. By always beginning with sets of objects unified by some property, we support students in connecting logic and proof to mathematical inferences. While the theory we develop is compatible with the standard theory of logic in most introduction to proof textbooks, we argue that these unique features of our instructional sequence allow us to build on students’ existing ways of reasoning and to connect logic more directly to the proof-based activities they exist to support. (Note: This research was funded by NSF DUE #1954613 and #1954768.)