962-S1-372 **Sybilla K Beckmann*** (sybilla@math.uga.edu), Department of Mathematics, University of Georgia, Athens, GA 30602. *Why formal set theory should be excluded from prospective elementary teachers' mathematics preparation.* Preliminary report.

This paper argues that the formal study of set theory and the practice of formally basing arithmetic on set theory should be excluded from the curriculum for prospective elementary school teachers. Presenting arithmetic in terms of naive set theory gives a deceptive gloss of greater rigor. It also erects a needless layer of formality, encouraging students to disconnect from their intuition about numbers. The difference between formality and precision is discussed. Some reasons for teaching set theory are examined. In each case, the goals to be achieved are either found to be unreasonable or could be achieved equally well by teaching more relevant mathematics. (Received September 12, 2000)