

## Department of Mathematics and Statistics Colloquium

### *Assessing Precision of Value Added Model Scores with Incorporation of Small Area Estimation Techniques*

Job Candidate

Abstract: There is a need in education to identify successful programs that help students and identify areas that are struggling. One approach utilizes value added modeling and standardized test scores. Students are expected to grow annually; if he or she grows above what is expected this additional growth is called value added. This additional value can be attributed to a teacher, school district or new programing. These models are currently being utilized in large urban school districts. While these models are useful in those areas, performance in smaller school districts is unknown specifically in regards to precision and accuracy. This presentation discusses a new approach to estimate value added model scores incorporating small area estimation techniques. Background on value added models and small area estimation are discussed in addition to the simulation process.

**Friday, December 9 at 2:30 in Roop 103**

**refreshments at 2:20**