This course will cover two topics: inference about forecast accuracy, and aspects of GMM estimation. Both published and (as yet) unpublished research will be discussed.

1. Forecast accuracy: Traditionally, statistical analyses of econometric models focus on “in-sample” analysis. This methodology has powerful theoretical and practical justification. However, it is not always particularly natural or effective. A number of empirical studies have found that models that seem to fit well by conventional in-sample criteria do poorly at out-of-sample prediction. Such empirical work in turn has stimulated theoretical econometrics work on inference about predictive accuracy. Such theoretical work is the subject of this part of the course.

2. GMM: Generalized method of moments is the workhorse of much of modern macroeconomics and finance. Yet a series of empirical and simulation studies have found that in some contexts GMM works poorly. This part of the course will review GMM and a literature that documents that GMM sometimes works poorly. It will also review some recent theoretical work that aims to refine or extend GMM so as to yield estimators that perform more satisfactorily.