Semester course: STAT 7550 -- 3 CREDIT HOURS

1. Transcript Abbreviation: (maximum 18 characters)
   Time Ser ThyMeth

2. Long course title
   Time Series Theory and Methods

3. Course description: (maximum of 250 characters)
   A systematic advanced treatment of areas of current interest in the statistical theory and methods for the analysis of time series processes. Topics will be announced each semester.

4. Prerequisites / Co-requisites (use quarter and semester codes):
   Stat 6801-6802 (620-622) and Stat 6950 (645) and Stat 6560 (656) OR Stat 6860, or permission of instructor.

5. Exclusions (use quarter and semester codes):
   None

6. A list of topics that make up the course: (One per line, max of 15 topics -- if you course description is a list of topics, I can just use that list)

   (Sample topics)
   Existence of time series processes
   Stationary processes
   Linear-time-invariant filtering
   Autocovariances and Spectral densities
   Forecasting
   Inference for time series processes
   Some discussion of asymptotics
   ARMA, ARIMA and SARIMA models,
   Multivariate processes
   Long range dependence
   Volatility modeling

7. Does you class have a component that is not just a lecture (YES/NO):

   NO

8. If your course is not a straight conversion and adds or removes material, write a brief rationale for the change (one sentence – max 250 characters).

   This is new advanced topics course.