**ISyE 6334 Course Topics**

**Operations Research for Supply Chain Engineering 2**

* Random variables, functions of random variables; mean and variance
* Supply chain performance measures, variability
* Law of Large Numbers and the Central Limit Theorem
* Queuing networks and queuing approximations of supply chains
* Markovian decision processes
* Reliability
* Forecasting, trends, seasonality, rare events
* Simulation: programming languages, reduction of variance, design of experiments