## 1126-00-56 Shaina L Race\* (shaina\_race@ncsu.edu), NC. Exponential Random Graph Models (ERGMs): An Introduction and an Application.

Exponential random graph models can be expressed as an analogy to logistic regression for network data. The goal is to use structural information about a network (typically a social network) as well as node-level and edge-level attributes to develop a model that explains how localized social processes and structures combine to form global network patterns. From such a model, inferences about network attributes like mutuality and homophily can be made. We offer an entry-level introduction to exponential random graph modeling and the types of attributes that can be accomodated, as well as a practical example regarding professional relationships at a consulting firm. (Received December 21, 2016)