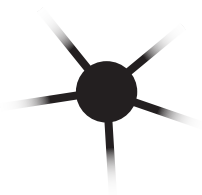
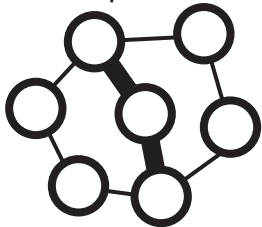


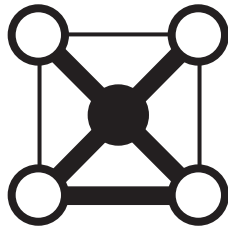
degree



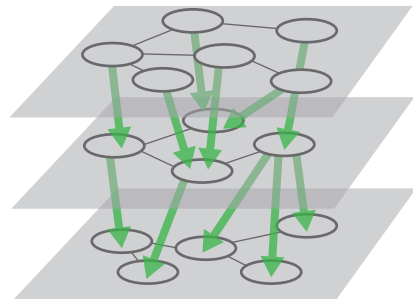
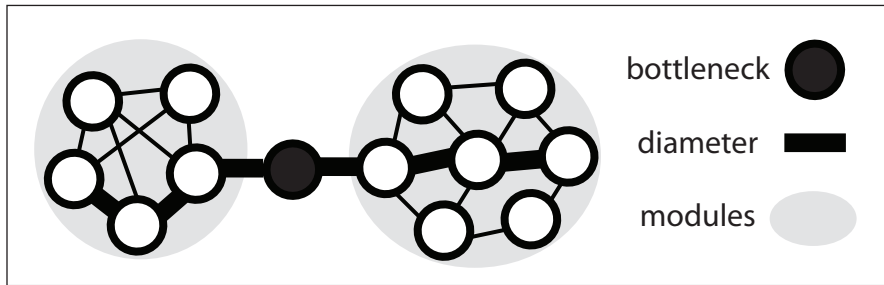
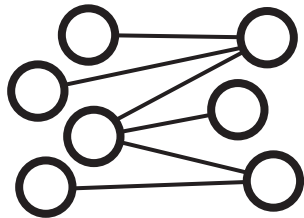
shortest path (distance)



clustering coefficient



bipartite



network hierarchy

- Betweenness centrality
- Mean path length (as a measure of net connectivity)
- Edgetic effects
- Network Motifs
- Meta-network
- Metabolic networks
- Regulatory networks
- RNA networks
- Yeast two-hybrid screens

clique: a subgraph in which every two pairs of nodes are connected (also called a “complete graph”)

density: $[\# \text{ edges}] / {}_n C_2$ (where $n = \# \text{ nodes}$)
→ note that a clique has the maximum possible density (i.e.: 1).

The **neighborhood** of node i is the set of other nodes to which it is connected

clustering coefficient of a node is the density associated w/the node’s neighborhood

dynamic network: a general term for a net that changes topologically over time (or some other series)

bow tie: term given to a multi-layered net in which intermediate layers have far fewer nodes than upper and lower layers of the hierarchy

local hypothesis: regulatory factors (proteins, miRNA, etc.) involved in the same disease are more likely to interact with one another (and/or have shared modules)

small-world phenomena: notion that there are very short paths between any pair of nodes within a network (even for large and complicated networks)

→ implications for network robustness and perturbation