9.a) Review the history and the basics of graph theory, the type of graphs, and network science.

9.b) Review a variety of network theoretical metrics (degree, degree distribution, shortest path, diameter), and classify the networks by degree of disribution.

10.a) Review molecular networks (nodes, interactions, origins of relationships, opportunities to collect).

10.b) Introduce the methods of detection of protein-protein interactions.

11.a) Review a probabilistic and context-specific networks and differences between them and types of nodes.

11.b) Review the robustness of scale-free networks.

12.a) How can the structure of proteins be determined? Where and in what form can you access the already defined structures?

12.b) How can secondary structures be assigned to proteins? What does the structure fit and cover? How can structural domains be identified?