Be able to:

Discuss the three hemostatic events that minimize blood loss from a damaged vessel.

List the important clotting factors and events of the coagulation process in their proper sequence.

Differentiate between arteries, arterioles, capillaries, sinusoids, venules, and veins.

Discuss the three structural layers of blood vessel walls and the composition of each. In addition, specify how the wall of an artery differs from the wall of a vein.

List and discuss the two major properties of arteries and specify which tissue layer is responsible for these properties.

Describe the structure of the different capillaries and how the structure facilitates the process of exchange.

Describe the purpose of one-way valves found in veins and associated problems.

Describe how blood flow and resistance affect blood pressure.

Discuss factors establishing and affecting blood pressure and how they relate to blood flow.

Discuss how blood vessels alter peripheral blood pressure and which vessels are most important in homeostatic control of blood pressure.

Discuss factors other than the vasomotor center that alter blood vessel diameter, such as chemicals, higher brain centers, and autoregulation.

Compare pressures in the arterial, capillary, and venous systems.

Identify and discuss factors affecting venous return including: one way valves, skeletal muscle contraction, breathing, rate of flow, cross-sectional area, pressure gradient, and gravity.

Explain the cause of the sound heard when using a sphygmomanometer to determine peripheral blood pressure.

Discuss the anatomy of the lymphatic system including vessels, nodes, and organs.
Describe the flow of lymph and how it relates to edema.

Distinguish between Non-Specific Immunity and Specific Immunity.

Identify the **anatomic** defense mechanisms of the body. (skin as barrier, etc.)

Describe the function of the following cells in terms of the immune response:
- plasma cells
- macrophages - REC
- T - lymphocytes (T - cells)
- B - lymphocytes (B - cells)

Distinguish between antigens and antibodies (globulins) and where each is found.

Explain how antibodies may function.

Given a list of events leading to the destruction of an antigen by cellular or humoral immunity be able to list the events in their proper order.

Recognize the difference between active and passive immunity and how each is acquired.

Describe the differences among the five primary types of immunoglobulins.

Discuss the importance of HIV as a pathogen and what makes it so successful.