

# Anatomy and Physiology II

## Learning Guide: Lymphatic System

**Overview** – We have two vascular systems in the body: cardiovascular and lymphatic systems. However, unlike the blood vessels, the lymphatic system is not a circulatory system but rather a "one-way" vascular system that continuously draws fluid from the interstitium that has not entered the distal portions of the capillaries. However, perhaps even more consequential is that this fluid is obligated to pass through lymphatic tissues that house our immune system. Therefore, this constant fluid flow through this system now functions as a surveillance system that monitors any potential adverse infectious or other disease states that may occur almost anywhere in the body.

Therefore, the discussion of the lymphatic system anatomy and some physiology will be foundational to the function of both non-specific and specific host immunity.

**Review Topics** – The topics covered in the blood, heart, and vessel lectures will be foundational to understanding the function of the lymphatic system. You will find some repetition of past topics applied in new ways.

**Getting Started** – The outline provides a guide to accessing the material in this unit. Anatomical terminology and associated physiology are essential. You will want to categorize the vocabulary and apply it correctly to your overall understanding of how this system works.

We will examine the system's anatomy, cytology, and physiology before transitioning to a foundational understanding of the immune system. This discussion will involve the anatomy of lymph nodes and the associated system of lymphatic vessels, followed by the anatomy and physiology of the lymph nodes and other lymphatic organs.

**Exam** – The exam is relatively short and will consist of the following:

- **Fill-In-The-Blank** – there are many Fill-In-The-Blank questions.
- **Multiple Choice** - There may also be some multiple choice questions.

If your exam is in-class, there is an illustration of the Hematopoiesis Flow Chart.

**Final Points** – Although the material in this unit is not lengthy, some students do poorly on the exam every semester because they undercompensate. It is essential to have a working knowledge of the terminology presented and the application of the topics discussed. You will want to have all terminology on your tongue – even those terms that may seem less important.