**LAB SESSION 4**

***All terminologies, concepts, and figures within each exercise are required (unless otherwise specified).***

**EXERCISE 5: CARDIOVASCULAR PHYSIOLOGY**

Learning Objectives: Following completion of this lab, the student will be able to:
- distinguish the heart sounds.
- measure and interpret heart rate, pulse rate and blood pressure.
- identify and describe the events of the cardiac cycle.
- record an electrocardiogram, identify and describe the various waves.
- identify and describe the different types of arrhythmias.

**EXERCISE 6: BLOOD VESSELS**

Learning Objectives: Following completion of this lab, the student will be able to:
- describe the anatomical structure of arteries, veins, and capillaries.
- trace the path of a drop of blood through the pulmonary and systemic circuits.
- identify the blood vessels of the pulmonary circuit.
- identify the major systemic arteries and the area(s) of the body each artery supplies.
- identify the major systemic veins and the area(s) of the body each vein drains.
- identify and describe the development of atherosclerosis.

**Notes:** You are not responsible for visual identification of the following:

**Figure 1:** endothelium; basement membrane; internal elastic membrane; smooth muscle layer; external elastic membrane
**Figure 2:** endothelium; basement membrane; valve
**Figure 3:** all
**Figure 4:** endothelium; basement membrane; internal elastic membrane; external elastic membrane
**Figure 19:** macrophages; collagen cap; exposed collagen fibers

You are not responsible for the following vessels:

**Arteries:** lingual artery; maxillary artery; occipital artery; thyrocervical trunk; costocervical trunk; coronary artery; posterior intercostal artery; internal thoracic artery; anterior intercostal artery; lateral thoracic artery; superior phrenic artery; deep palmar arch; superficial palmar arch; inferior phrenic artery; gastric artery; suprarenal artery; gonadal artery; lumbar artery; median sacral artery; doral pedal artery; posterior tibial artery; fibular artery

**Veins:** facial vein; occipital vein; vertebral vein; posterior intercostal veins; accessory hemiazygos vein; hemiazygos vein; azygos vein; ascending lumbar vein; radial veins; ulnar veins; brachial veins; inferior phrenic veins; suprarenal vein; gonadal veins; lumbar veins; medial sacral vein; cystic vein; gastric veins; posterior tibial veins; fibular veins; anterior tibial veins; popliteal veins; femoral vein