Core Surgical Anatomy – Learning outcomes

**Thorax 1 – Breast, anterior thoracic wall muscles, heart, pericardium, great vessels.**

Describe the anatomy of the breast including its neurovascular supply. Explain the lymphatic drainage of the breast and its clinical relevance to metastatic spread.

Demonstrate the main anatomical features and surface landmarks of the thoracic vertebrae, ribs and sternum.

Describe the anatomy of the intercostal muscles. Describe a neurovascular bundle in a typical intercostal space and outline the structures its components supply.

Demonstrate the surface markings of the heart and great vessels.

Demonstrate the arrangement of the fibrous and serous layers of the pericardium and relate it to conditions such as cardiac tamponade and pericarditis.

Describe the origin, course and main branches of the left and right coronary arteries and discuss the functional consequences of their obstruction in conditions such as ischaemic heart disease.

Identify the major anatomical features of each chamber of the heart and explain their functional significance.

Describe the structure and position of the atrio-ventricular, pulmonary and aortic valves and describe their function in the prevention of reflux of blood during the cardiac cycle.

Describe the anatomical course of the spread of electrical excitation through the chambers of the heart.

Demonstrate the surface markings of the heart and the position and site of auscultation of its four major valves.

Describe the course of the ascending aorta, the arch of the aorta and the descending thoracic aorta. Name their major branches and the structures they supply.

Describe the origins, courses and relationships of the brachiocephalic veins, inferior and superior venae cavae and the azygos venous system.