Dentists need to have a general understanding of their patients overall systemic health. Health issues involving the cardiovascular organs and the respiratory organs affect many of the patients they see, and can effect treatment and treatment outcomes. A comprehensive understanding of the anatomy (developmental, histologic and gross anatomical), physiology and pathology of the Thorax & Cardiorespiratory System is essential for this purpose.

HWDP 142. Gastrointestinal System in Health and Disease. 2 Units.
The practice of dentistry focuses on the mouth, the beginning of the gastrointestinal tract. Therefore, an understanding of processes like swallowing and salivation are central to the practice of dentistry, while a basic understanding of digestive function is central to the continued well-being of the patient because it is the portal for entry of nutrients to the body. Disorders associated with the digestive tract, or which impact the function of the digestive tract (for instance, bulimia) can have profound effects on oral health, while some pharmacological agents used in the treatment of those disorders have potential adverse effects on oral health. Therefore, a firm understanding of the gastrointestinal tract in health and disease is a necessity for modern dental care.

HWDP 232. Renal and Hematologic Systems in Health and Disease. 2 Units.
One of the major connective tissues of the human body is blood. The kidneys play a role in the filtration of the plasma and assist in the maintenance of blood pressure and acid-base balance. The cellular entities of the blood (red cells, white cells and platelets) are needed to provide flow of oxygen and other metabolic substrates to and from all the tissues of the body and play a significant role in the defense of the body and repair of these tissues. It is therefore necessary for the dental practitioner to understand the histology, anatomy, physiology and pathologic processes that affect these systems.

HWDP 243. Endocrine and Reproductive Systems in Health and Disease. 1.5 Unit.
Dentists need to have a general understanding of their patients overall systemic health. Health issues involving the endocrine and reproductive tracts can affect treatment and treatment outcomes. A comprehensive understanding of the anatomy (developmental, histologic and gross anatomical) physiology and pathology of these systems is essential for this purpose.

HWDP 245. Musculoskeletal System in Health and Disease. 1.5 Unit.
The musculoskeletal system is an intrinsic part of the practice of dentistry, where an understanding of how muscles work and the normal physiology of bone serve as a background to the understanding of mastication and occlusion. A variety of musculoskeletal disorders also impact directly or indirectly on the ability of the dentist to care for their patient, while some pharmacological agents used in the treatment of those disorders have potential adverse effects on oral health. Therefore, a firm understanding of the musculoskeletal system in health and disease is a necessity for a well-trained clinician.

HWDP 246. Neuroscience in Health and Disease. 2 Units.
Dentists need to have a general understanding of their patients overall systemic health. Health issues involving the nervous system can affect treatment and treatment outcomes. In addition, dentists will regularly be affecting normal neural function through the use of local anesthetics and anxiolytics. A comprehensive understanding of the anatomy (developmental, histologic and gross anatomical) physiology and pathology of these systems is essential for this purpose.