RESPIRATORY - MD (RES)

RES 140 Respiratory 6 cr
The Respiratory Module will introduce students to the anatomy, physiology, and pathophysiology of the respiratory system with a particular focus on the lung?s central role in gas-exchange and fluid balance. Normal and abnormal anatomy from the sinuses, oral/nasopharynx, and upper airways to the lower respiratory tract, including the structures of the chest wall and thoracic cavity, will be presented through the combined use of prosections and radiologic imaging. The mechanics of breathing as well as the impact of diseases of the airway, interstitum, and pulmonary circulation on respiratory function, will be taught using lecture, patient-oriented active learning, clinical skills? labs, and independent learning. Students will be taught the cellular and molecular mechanisms involved in a broad category of lung diseases including obstructive disease, restrictive disease, pulmonary vascular disease, lung cancer, and infections of the upper and lower respiratory tract. How these disease processes interact to alter gas-exchange leading to hypoxemia, hypercarbia, and respiratory failure will be an integral part of this course. Students will also gain experience in the proper diagnosis, treatment, and prevention of these respiratory diseases. The social impact of chronic respiratory disease on patients and their families, particularly for those with advanced disease, will also be highlighted during interactions with actual patients and in active learning sessions within small groups.

RES 240 Respiratory 6 cr
The Respiratory System Module will introduce students to the anatomy, physiology and pathophysiology of the respiratory system with a particular focus on the lung?s central role in gas-exchange and fluid balance. Normal and abnormal anatomy from the sinuses, oral/nasopharynx and upper airways to the lower respiratory tract, including the structures of the chest wall and thoracic cavity, will be presented through the combined use of prosections and radiologic imaging. The mechanics of breathing as well as the impact of diseases of the airway, interstitium and pulmonary circulation on respiratory function will be taught using lecture, patient-oriented small group learning, clinical skills? labs and independent learning.Students will be taught the cellular and molecular mechanisms involved in a broad category of lung diseases including obstructive disease, restrictive disease, pulmonary vascular disease, lung cancer and infections of the upper and lower respiratory tract. How these disease processes interact to alter gas-exchange leading to hypoxemia, hypercarbia and respiratory failure will be an integral part of this course. Students will also gain experience in the proper diagnosis, treatment and prevention of these respiratory diseases. The social impact of chronic respiratory disease on patients and their families, particularly for those with advanced disease, will also be highlighted during interactions with actual patients and in small group learning sessions.