Title of Course: Cardiovascular Pathophysiology

Academic Year: 2017-2018

Duration of Course: 4 weeks

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Mission Statement of Course:

This course provides students with a clinically oriented framework for understanding common pathophysiologic derangements of normal cardiac function.

Goals of Course:

Our course offers a comprehensive review of normal anatomy, hemodynamic function, electrophysiology, pathology and pharmacology. This is coupled to an in-depth study of cardiovascular diseases including cardiomyopathies, valvular heart disease, ischemic heart disease, vascular diseases, and congenital heart disease. Our course is taught from a clinical perspective, focusing on a physiological understanding of the underlying pathophysiology, connecting pathophysiology to patient signs and symptoms, and understanding the role of various medical and procedural treatments to restore normal physiologic performance.

Objectives of Course:

1. Describe the normal anatomy, hemodynamic function, and electrophysiology of the cardiovascular system.

2. Identify the pathophysiological, environmental and behavioral aspects of cardiovascular diseases.
3. Formulate a differential diagnosis related to a cardiovascular disease.

4. Analyze and interpret an electrocardiogram.

5. Describe the major classes of medications utilized in the management of cardiovascular diseases; name specific drugs within each class; discuss the primary mechanism of action and identify both common and life threatening.

6. Describe common surgical and procedural interventions to manage cardiovascular diseases.