

Matters of the Heart

Course Description:

13 Weekly lectures discussing the basic structure and function of the cardiovascular system; with individual lectures dedicated to discussion of common disease conditions affecting this system, their risk, causes, manifestations, diagnosis and treatment. Subject matter is based on the recent scientific literature from major national and international professional organizations and their guidelines and recommendations.

Course Syllabus

1. Cardiovascular Health: An Overview

A discussion of the components, function and diseases of the cardiovascular system.

2. Hearts on Fire: The Inflammatory Response

A brief discussion of the basics of the inflammatory response and its role in cardiovascular disease

3. Killing Me Softly: Hypertension

A discussion of the mechanisms, causes and monitoring of high blood pressure.

4. Heart Ache: Coronary Artery Disease

A discussion of the basic anatomy, disease process, diagnosis and treatment of coronary artery disease.

5. One-Way Street: Valvular Heart Disease

A brief overview of anatomy, diseases and treatment of cardiac valves.

6. A Venus Heart: Heart Disease in Women

A discussion of the differences between men and women in causes, presentation and outcomes of cardiovascular disease. Along with the root causes for these differences.

7. Rhythm and the Blues

A discussion of how the heart rhythm originates, how it is recorded, some common abnormal rhythms and their impact on survival.

8. Of Turkeys and Men (And Women)

A discussion of different conditions that affect aortic and arterial health and their treatment.

9. Red Pumps and Hose: Assisted Circulation

A discussion. Of causes, manifestations and treatment of heart failure, including mechanical circulation, artificial hearts and transplant.

10. It's My Life: Lifestyle Modifications

An overview of the internal and external stressors affecting risk for cardiovascular disease, and how to mitigate their effect.

11. Recipe for Disaster: Diet and Nutrition

A review of the role of macro- and micronutrients and dietary patterns on reducing the risk for cardiovascular disease.

12: Walk it Off: Exercise and Cardiovascular Health.

The beneficial effects and recommended regimens for exercise and physical activity.

13. The Mind Job: Stroke Risk.

Overview of risk factors, types and presentations of strokes with recommendations for mitigating this risk.