

Course Objectives/Course Outline
Spokane Community College

Course Title: Cardiovascular Physiology

Prefix and Course Number: VASC 138

Course Description:

An advanced study of normal cardiovascular physiology. Presented in a series of physician lectures and lab demonstrations with applications in Invasive and Noninvasive Cardiology.

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Describe the physical factors which effect blood circulation.
- Review electrophysiology and how it relates to the ECG.
- Explain and solve problems relating to the hemodynamics of blood flow.
- Relate the physical principles of the heart as a pump.
- Describe the physical principles related to arterial blood flow.
- Describe the regulation of blood flow, cardiac output, and neurologic effects.

Course Outline:

- I. The Circuitry
- II. Electrophysiology
- III. Cardiac Pump
- IV. Regulation of Heartbeat
- V. Hemodynamics
- VI. Arterial System
- VII. Microcirculation
- VIII. Peripheral Circulation
- IX. Cardiac Output
- X. Coronary Circulation
- XI. Special Circulations
- XII. Interplay of Factors in Control of the Circulation