

**Course Objectives/Course Outline**  
**Spokane Community College**

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**Course Title: Vascular Fundamentals**

**Prefix and Course Number: ECHO 112**

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**Course Learning Outcomes:**

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

Introduction to basic vascular anatomy of the lower and upper extremities, abdomen, visceral organs and cerebral vasculature with emphasis on physiology of these systems; Introduces the concepts essential for the performance and interpretation of vascular exams. Laboratory experiences are required.

- Describe the principles of blood flow and hemodynamics within the normal arterial and venous systems.
- Describe blood flow variables within the vascular systems and when they occur.
- Identify the major anatomical components of the vascular system; to include all major arteries and veins in the periphery, head and abdomen.
- Describe the arterial and venous physiology of the organs in the head, abdomen, and periphery.

**COURSE OUTLINE:**

- I. Anatomic Terminology
- II. Vessel Anatomy
- III. Cardiopulmonary, Systemic, and Peripheral Circulation
- IV. Arterial and Venous Physics and Hemodynamics
- V. Renal Vascular and Venous Physics and Hemodynamics
- VI. Final Exam