

RAD 369 MASTER SYLLABUS

COURSE NUMBER AND TITLE:

RAD 369, VASCULAR SONOGRAPHY

COURSE DESCRIPTION:

A study of vascular anatomy, physiology, hemodynamics, wave form analysis, and treatment of vascular disease. Emphasis will be placed on carotid duplex color flow imaging, upper and lower extremity arterial and venous duplex/color flow imaging, and ankle brachial indices, including the clinical history, physical assessment, and appropriate scanning protocol. Restricted to major or consent of school. Students must receive a grade of "C" or higher to advance within the Sonography Program.

PREREQUISITE:

Students must possess basic Sonography knowledge/skills.

COURSE OBJECTIVES:

Upon completion of this course the student will be able to:

1. Demonstrate a basic knowledge of vascular hemodynamics.
2. Identify the anatomy and physiology of the arterial and venous systems.
3. Identify normal and abnormal spectral Doppler waveforms and flow patterns.
4. Demonstrate the clinical application of duplex and color flow imaging of the carotid arteries and the lower extremity arteries & veins.
5. Understand the methods for obtaining quantitative information and the diagnostic relevance of each measurement.
6. Apply the techniques for detecting and quantifying disease and utilize basic interpretation criteria.
7. Obtain patient history and conduct physical examination appropriate to the exam.
8. Gain knowledge and confidence to perform and/or analyze vascular examinations.

MEANS OF STUDENT EVALUATION

All students are expected to attend class and come prepared to discuss the topic(s) assigned.

No make-up opportunities for missed daily quizzes or assignments will be offered.

Types of assignments include, but are not limited to, readings, oral and written exercises. Additional assignments and assessments can be added at any time deemed necessary by instructor.

*Tests will cover text, lecture and handouts. No make-up tests will be given except for instructor approved absences, and may be subject to point penalty. Course assignments, quizzes, tests and final exam are weighted as listed below. Grades are determined by the percentages and point values as follows:

Grading scale	A = 93 -100%
	B = 85 - 92%
	C = 77 - 84%
	D = 70 - 76%
	F = < 70%

TEXTBOOKS:

Required:

Rumwell C, McPharlin M: Vascular Technology- An Illustrated Review. 5th edition, Pasadena, Davies Publishing, 2014

Additional Reading Recommendations:

Zwiebel, WJ: Introduction to vascular ultrasonography, 5th edition, Philadelphia, PA, WB Saunders, 2009.

Daigle, RJ: Techniques in noninvasive vascular diagnosis: An encyclopedia of vascular testing 3rd edition, Littleton, CO, Summer Publishing, 2008.