Revised 7/2017

NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY
DMS – 223 INTRODUCTION TO VASCULAR ULTRASOUND (3 CR.)

Course Description

Discusses the principles of vascular ultrasound, the related anatomy and more common pathologies detected as well as the physiology and hemodynamics detected and evaluated with ultrasound. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

General Course Purpose

The purpose of this course is to introduce vascular sonography as cross-training for students studying a sonography specialty area other than vascular ultrasound. This will enable DMS students to function in clinical settings that practice multiple sonography specialties.

Course Prerequisites/Corequisites

Prerequisite: DMS 190, DMS 196, and DMS 231 courses with a grade of "C" or better.

Course Objectives

The DMS 223 Introduction to Vascular Ultrasound course objectives align with the National Education Curriculum for Sonography (NEC) provided by the Joint Review Committee on Education in Diagnostic Medical Sonography (JRCDMS). http://www.jrcdms.org/nec/

At the end of this course, the student will be able to:

a) Describe normal vascular anatomy and physiology of the cerebrovascular, peripheral vascular, and abdominal vascular systems.
b) Describe normal and abnormal hemodynamics of the cerebrovascular, peripheral vascular and abdominal vascular systems.
c) Describe appropriate sonographic and Doppler technique and appearance of the cerebrovascular, peripheral vascular and abdominal vascular systems.
d) Identify risk factors and signs and symptoms of common vascular disease processes.
e) Identify common pathology in terms of sonographic and Doppler appearances.
f) Perform sonographic evaluations of cerebrovascular, peripheral venous, peripheral arterial, and abdominal vascular systems.

Major Topics to be Included

1. Normal anatomy, normal physiology, and common pathophysiology of the following structures:
   a. Cerebrovascular System
   b. Peripheral Arterial System
   c. Peripheral Venous System
   d. Abdominal Vascular System

2. Sonographic appearances and vascular patterns for both normal and diseased states for the following structures:
   a. Cerebrovascular System
   b. Peripheral Arterial System
   c. Peripheral Venous System
   d. Abdominal Vascular System