

Course Prefix/Number/Title: DMS 242L Vascular Ultrasound II Lab

Number of Credits: 1 semester credit

Course Description: This course is a hands-on scanning lab designed to focus on the knowledge, skills and techniques for acquisition of appropriate sonographic images of peripheral vascular structures in the human body. It is integrated with DMS 242 Vascular II which will focus on the anatomy, hemodynamics, Duplex imaging and noninvasive testing of upper and lower extremity venous and lower extremity arterial sonographic to include physiologic diagnostic imaging and testing.

Pre-requisites: DMS 241, DMS 241L

Corequisites: DMS 242, DMS 224, DMS 250, DMS 285

Course Objectives:

1. Describe physiology and hemodynamics involved in peripheral vascular blood flow and imaging.
2. Identify peripheral venous and arterial vessel anatomy on diagrams and on images.
3. Describe peripheral arterial and venous imaging protocols in relation to ultrasound evaluation and assessment of disease.
4. Describe Doppler spectrum analysis and color flow imaging related to peripheral vascular imaging and assessment of disease.

Instructor: Keshia Gathman/Amy Hofmann

Office: Suite 302 5th Ave Building, Trinity Health

Office Hours: 9 AM to 2 PM Tu, Th and by appointment

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Lecture Schedule: 10:30 am - 12:00 pm Tu, January 9 to May 3 in Suite 301

Lab Schedule: 8:30 – 10:30 am Tu, January 9 to May 3 in Suite 301

Textbook: Diagnostic Sonography, Hagen-Ansert, 8th Edition; Pellerito J., Polak J. Introduction to Vascular Ultrasound, 6th ed.

Lab Manual: Trinity Health Clinical Education Handbook

Course Requirements:

Grading is based on completion of assignments, quizzes and test.

Assignments	15%
Quizzes	15%
Test	70%

Consistent with class attendance policy, the student is responsible for attending every class and for the material presented. If a student will not be attending a class, he/she must notify the Program Director prior to absence to plan for makeup time and activities.

Grading Criteria

- A = 94-100% of the total points
- B = 87 - 93% of the total points
- C = 80 - 86% of the total points
- F = <79% of the total points

Tentative Lecture Outline:

<u>WEEK</u>	<u>TOPIC</u>	<u>ASSIGNMENTS</u>
1	lower extremity venous DVT scanning	
2	cont.	
3	cont.	
4	cont.; Lab Assessment DVT	Lab Assessment 1 Assignment 1 LE DVT Image Ppt.
5	Upper extremity DVT Power Pt Lecture	
6	UE DVT cont.	
7	cont.	Quiz 1 DVT Protocol Assignment 2 UE DVT Images Ppt.
8	ABI segmental Protocol	
9	review	
March 4	SPRING BREAK March 4th – 8th	
11	Lower extremity arterial Power Pt. Lecture	
12	cont.	
13	cont.	Quiz 2 LE Arterial Protocol
14	cont.	
15	cont.; Lab Assessment LE Arterial	Lab Assessment 2 Assignment 2 LE Arterial Images Ppt.
16	Final Test	

CTE Competency/Department Learning Outcome(s):

CTE Competency #1: Employ industry-specific skills in preparation for workplace readiness.

Learning outcome #1 – Students will be able to formulate effective technical factors based on patient body habitus, pathology and equipment limitations. SLO 1.1

Learning outcome #2 – Students will demonstrate ability to critically evaluate completed images for diagnostic quality. SLO 1.2

Relationship to Campus Focus:

This course addresses a DMS Program focus by developing the knowledge and psychomotor scanning skill sets necessary to perform sonography of perform extremity and abdominal visceral vascular imaging. Students will be instructed by utilizing the protocols and techniques that are currently used in sonographic imaging.

Classroom Policies:

1. Cell phones and related devices are monitored in the classroom at all times. It is recommended that you do not bring your cell phone or other electronic devices into the classroom or, at the very least, get instructor permission to use approved devices as classroom learning resources.
2. Food and beverages are permitted in accordance with classroom policy.
3. Be respectful of other students, instructors, and guests.

Student Email Policy:

Students must provide Trinity Health DMS faculty with a personal email address for communication while in the program. A student's given e-mail address will be the only one recognized by the Trinity Health DMS program for official mailings. The liability for missing or not acting upon important information conveyed via email because of a failure to access their e-mail address rests with the student. Additionally, Dakota College at Bottineau and Minot State University campus community is increasingly dependent upon electronic communication among faculty, staff and students. A student's campus-assigned e-mail address will be the only one recognized by the campus for official mailings. The liability for missing or not acting upon important information conveyed via email because of a failure to access a campus-assigned e-mail address rests with the student. Additionally,

Academic Integrity

Dishonesty in the classroom or laboratory and with assignments, quizzes and exams is a serious offense and is subject to disciplinary action by the DMS Program Director. For more information, refer to the Trinity Health DMS Program Handbook policies. Additionally, according to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

Disabilities and Special Needs

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

Title IX:

Trinity Health, Minot State University and Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all MSU and DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.