



Course Prefix/Number/Title: DMS 241L Vascular Sonography I Lab

Number of Credits: 1 semester credit

Course Description:

This course is the hands-on sonographic scanning lab integrated with DMS 241, the didactic course that focuses on the knowledge, skills and techniques for acquisition of vascular structures. Appropriate sonographic protocols and image optimization techniques of the vascular structures will be included as well as Color and spectral Doppler applications applied to the appropriate anatomy.

Pre-/Co-requisites: DMS 241

Course Objectives:

1. Describe sonographic protocols for imaging of carotid vessels.
2. Discuss sonographic protocols for lower extremity venous vessels.
4. Describe and sonographically identify carotid arterial anatomy.
5. Describe and sonographically identify lower extremity venous anatomy.

Instructor: Keshia Gathman, Amy Hofmann

Office: 5th Floor Medical Arts Clinic, Trinity Health

Office Hours: 3-5pm M-Th and by appointment

Phone: 701-857-5620

Email: amy.hofmann@trinityhealth.org

Lecture/Lab Schedule: 9:00 am to 1:00 pm Th, September 25 to December 18 in MAC Skywalk Rm A

Textbook(s): Diagnostic Sonography, Hagen-Ansert, 9th Edition; Workbook Diagnostic Sonography, Hagen-Ansert, 9th Edition; Edelman, Sidney B. Understanding Ultrasound Physics. 4th ed; Pellerito J., Polak J. Introduction to Vascular Ultrasound, 6th ed; Trinity Health Clinical DMS 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 Course Outline:

Date	Topic/Scanning	Assignment/Quiz/Test
9/25	Carotid Sonographic Imaging PPT Lecture	
10/2	Carotid Scanning	Assignment #1 Carotid Doppler Image Labeling
10/9	Carotid Scanning	
10/16	Carotid Scanning	
10/23	Carotid Scanning	Quiz #1 Carotid Protocol
10/30	Carotid Scanning Lab Assessment	Lab Assessment on Carotid Protocol Assignment #2 Carotid Imaging Protocol PPT
11/6	Lower Extremity Venous DVT PPT Lecture	
11/13	Lower Extremity	
11/20	Lower Extremity	
12/4	Lower Extremity Review for Final	Quiz #2 LE DVT Protocol
12/11	Final Test	Final Test

Competency/Department Learning Outcome(s):

Employ industry-specific skills in preparation for workplace readiness

Learning outcome #1 – Students will demonstrate ability to formulate effective technical factors based on fetal and maternal physical limitations, 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

Learning outcome #3 – Students will demonstrate professional behavior in the classroom and clinical setting by treating others with dignity, respect and compassion. SLO 3.2

Learning outcome #4 – Students will acquire sonographic images of diagnostic quality. SLO 4.1

Relationship to Campus Focus:

This course addresses a DMS Program theme by developing the knowledge and psychomotor scanning skill sets necessary to perform cerebrovascular, 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:

Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email 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 campus email rests with the student. Additionally, student must provide Trinity Health DMS faculty with a personal email address for communication while in the program.

Academic Integrity:

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. Additionally, 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.

Disabilities or Special Needs:

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

Title IX:

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 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.

AI Student Policy:

Unless otherwise indicated in the course syllabus, or in individual instructions for course assignments, or in the absence of the express consent of the course instructor, students are not allowed to utilize generative AI to help produce any of their academic work. Any violation of this policy will be considered an act of academic dishonesty as outlined within the Dakota College Code of Student Life.

RESPONSIBILITIES

Students	• Responsible to follow the syllabus and assignment instructions regarding use of generative AI for all academic work. • Obtain permission of the instructor prior to the use of generative AI that is outside of the syllabus or assignment instructions. Provide appropriate rationale for how the use of generative AI will enhance the learning experience for the assignment. • In instances where generative AI is permissible, appropriately cite the generative AI program used and indicate where in the assignment it was used, in a brief submission statement.
----------	--

Faculty	• Determine if the use of generative AI could enhance student learning in any assignment or project. • Clearly indicate in all course syllabi if generative AI is allowable for any academic work. • If allowable, give specific parameters for how and when generative AI may be used. • If a violation of generative AI for the individual course/syllabus is suspected, discuss the concern with the student. If violation is still suspected, inform the appropriate semester coordinator/program director.
---------	---