



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

Number of Credits: 2 semester credit

Course Description:

This course is designed to focus on the knowledge, skills and techniques for acquisition of appropriate sonographic images of peripheral vascular structures in the human body. Students will be introduced to the anatomy, normal findings and technical principles of ultrasound utilization in the hemodynamic considerations for assessment of peripheral vascular imaging. It is integrated with DMS-242L Vascular II Lab which will be focused on scanning labs of upper extremity venous and lower extremity arterial sonographic and physiologic diagnostic imaging and testing.

Pre-/Co-requisites: DMS 242L

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 anatomy 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: Amy Hofmann, Keshia Gathman

Office: Suite 302 5th Ave Building, Trinity Health

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

Phone: 701-857-5620

Email: amy.hofmann@trinityhealth.org

Lecture/Lab Schedule: 12:00 -3:00 pm Tu, Th, April 3 to May 12, 2023 in Suite 301; Lab 8:30 – 10:30 am Tu, Th, April 3 to May 12, 2023 in Suite 301;

Textbook(s): Diagnostic Sonography, Hagen-Ansert, 8th Edition; Workbook Diagnostic Sonography, Hagen-Ansert, 8th Edition; Pellerito J., Polak J. Introduction to Vascular Ultrasound, 6th ed.; 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 Course Outline:

WEEK	TOPIC	READING
1-Apr 3	peripheral venous anatomy	
2-Apr 10	extremity superficial and deep vein anatomy	
3-Apr 17	risk factors, signs, symptoms, mechanisms of venous disease	
4-Apr 24	peripheral arterial anatomy, physiologic Duplex testing, risk factors, disease processes	
5-May 1	Doppler spectrum analysis and color flow imaging	
6-May 8	review and testing	

General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s):

Employ industry-specific skills in preparation for workplace readiness

Relationship to Campus Focus:

This course addresses a DMS Program theme by developing the knowledge and psychomotor scanning skill sets necessary to 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 prohibited 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, turn it off.
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.

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.

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.