



Course Prefix/Number/Title: DMS 242 Vascular II

Number of Credits: 2

Course Description: This course is designed to focus on the knowledge, skills and techniques for acquisition of appropriate 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.

Pre-/Co-requisites: DMS 241, DMS 241L/DMS 242L

Course Objectives: Upon completion of this course, students will be able to:

1. Describe physiology and hemodynamics involved in peripheral vascular imaging.
2. Discuss normal anatomy peripheral vascular anatomy.
3. Describe peripheral arterial and venous anatomy in relation to ultrasound evaluation and assessment of disease.

Instructor: Amy Hofmann, MBA, RDMS

Office: Suite 302 5<sup>th</sup> Ave Building, Trinity Health

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

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Lecture/Lab Schedule: 8 -10 AM Tu, January 12 to May 14/10 AM – 12 PM Tu, January 12 to May 14

Textbook(s): Pellerito J., Polak J. Introduction to Vascular Ultrasound. 6<sup>th</sup> ed. Philadelphia, PA; Elsevier, Inc. 2012

Course Requirements: Attendance and participation. Students are expected to read the text and come to class prepared to listen and discuss during lectures. Didactically, the student's outcome is based upon the completion of assignments, quizzes and final test.

Assignments:	15%
Quizzes	15%
Tests	70%

Associated Lab learning assignments and outcomes are specified in the DMS-242L Vascular II Lab syllabus. 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 or she must notify the Program Director prior to absence to plan for makeup time and activities.

Grading Criteria:

- Quizzes and Tests
- 100-94% = A
- 93-87% = B
- 86-80% = C
- 79- 0% = F

Tentative Course Outline:

<b>Week/Class/Day</b>	<b>Topic</b>
<b>1/Jan 11</b>	Peripheral Venous Anatomy
<b>2/Jan 18</b>	Extremity superficial veins
<b>3/Jan 25</b>	Extremity deep veins
<b>4/Feb 1</b>	Central venous system
<b>5/Feb 8</b>	Risk factors
<b>6/Feb 15</b>	Mechanisms of disease
<b>7/Feb 22</b>	Signs and symptoms of venous disease
<b>8/Mar 1</b>	Noninvasive test procedures for DVT
<b>9/Mar 8</b>	Noninvasive test procedures for chronic venous insufficiency
<b>10/Mar 15</b>	<b>Spring Break</b>
<b>11/Mar 22</b>	Peripheral arterial anatomy
<b>12/Mar 29</b>	Risk factors
<b>13/Apr 5</b>	Mechanisms of disease
<b>14/Apr 12</b>	Noninvasive test procedures
<b>15/Apr 19</b>	Duplex and color flow imaging
<b>16/Apr 26</b>	treatment
<b>17/May 3</b>	Final
<b>18/May 10</b>	Catch up /Review Final

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

1. Demonstrate problem-solving skills
  - a. identify normal and abnormal vascular anatomy
  - b. determine sonographic equipment and protocol adaptations for diagnostic image capture
2. Expand critical thinking competence
  - a. assess vascular anatomy, physiology and hemodynamics
  - b. make appropriate imaging protocol adaptations based on recognized patient pathologies

Relationship to Campus Focus: This course addresses a DMS program theme by developing the knowledge and psychomotor scanning skill sets necessary to perform sonography of extremity vascular structures that are currently used in sonographic imaging.

Classroom Policies: Be polite and respectful of the instructor, other students and guests in classroom. Cell phones and related devices are prohibited in the classroom during quizzes and tests. Food and beverages are permitted in classroom.

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.