

Introduction to Vascular Technology

Class

DSVT 1103

Introduction to basic non-invasive vascular topics. Emphasizing image orientation, transducer handling, and identification of anatomic structures. (1-0-0)

Course Learning Objectives

Describe fundamental vascular concepts of duplex and non-imaging procedures including vascular anatomy, positioning the patient, equipment, and other devices.

Required Textbooks

Claudia Rumwell & Michalene McPharlin (2015).Vascular Technology, An Illustrated Review (5th ed.). [ISBN: 0-941022-85-4]

Evaluation Standards

Exams	50%
Quizzes	20%
Final Exam	30%

Grading Standards:

- A 92-100%
- B 85-91%
- C 78-84%
- F <78%

Course Progression

1. Identify the major arteries of the upper and lower extremities and the branches of the abdominal aorta, to include the following: (F1, 2, 4, 5, 7, 8, 9, 10, 11, C1, 3, 7, 10, 11, 12, 13, 14, 15, 18, 19)
 1. Anatomy
 2. Upper extremity arteries
 3. Abdominal aorta
 4. Lower extremity arteries
 5. Microscopic anatomy of the arterial wall, capillaries, arterioles
2. Differentiate between arterial and venous wall anatomy at the microscopic level (F1, 2, 4, 5, 7, 8, 9, 10, 11, C1, 3, 7, 10, 11, 12, 13, 14, 15, 18, 19)
3. Identify the vessels in the extracranial and intracranial cerebrovascular system, to include the following: (F1, 2, 4, 5, 7, 8, 9, 10, 11, C1, 3, 7, 10, 11, 12, 13, 14, 15, 18, 19)
 1. Anatomy
 2. Aortic arch
 3. Carotid artery (extracranial)
 4. Vertebral artery (Vert)
 5. Intracranial Circulation
4. Identify the central, upper, and lower extremity deep and superficial veins, and list the major perforating veins in the lower extremity (F1, 2, 4, 5, 7, 8, 9, 10, 11, C1, 3, 7, 10, 11, 12, 13, 14, 15, 18, 19)
 1. Anatomy
 2. Upper extremity deep veins

3. Upper extremity superficial veins
4. Lower extremity deep veins
5. Lower extremity superficial veins
6. Lower extremity perforating veins
7. Vein walls and valve leaflets

Absences

Attendance is the biggest predictor of your success. Attendance at every class is expected. You will be allowed to miss **2** class days (exception for test days) and/or two lab days (if applicable) without it adversely affecting your grade. **Every one absence over the allotted days will result in your final grade being reduced by one letter grade.** If you are more than 15 minutes late to lecture or lab, this will constitute an absence. Three tardies count as one day absent. You are required to notify the instructor prior to any absence. Failure to do so will result in an unexcused absence.

An exam missed because of an excused absence must be made up the day that you return to class. An exam missed because of an unexcused absence may *not* be made up, and you will receive a grade of zero (0) for that exam. Pop quizzes may not be made up under any circumstances.

All class and clinical assignments are due on the appointed dates at the designated time. **Failure to turn in assignment on time will result in an automatic 15 points off. Failure to submit an assignment within the same day will result in a grade of "0."** Although a grade of "0" will be given, the individual instructor reserves the right to ask for completion of the assignment. Failure to comply with request will result in incompleteness of the course.

You must achieve a minimum of 78% or higher to pass this course.

Cell phones shall be stored on silent in your backpack, handbag, or purse. Cell phones may be accessed during breaks.

A student shall retain all rights to work created as part of instruction or using College District technology resources.

Disabilities

ADA Statement:

Any student with a documented disability (e.g. learning, psychiatric, vision, hearing, etc.) may contact the Office on the Weatherford College Weatherford Campus to request reasonable accommodations. *Phone:* 817-598-6350 *Office Location:* Office Number 118 in the Student Services Building, upper floor. *Physical Address:* Weatherford College 225 College Park Drive Weatherford, TX.

Academic Integrity

Academic Integrity is fundamental to the educational mission of Weatherford College, and the College expects its students to maintain high standards of personal and scholarly conduct. Academic dishonesty of any kind will not be tolerated. Academic dishonesty includes, but is not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials including unauthorized use of Generative AI. Departments may adopt discipline specific guidelines on Generative AI usage approved by the instructional dean. Any student who is demonstrated to have engaged in any of these activities will be subject to immediate disciplinary action in accordance with institutional procedures.

SCANS

The Secretary's Commission on Achieving Necessary Skills (SCANS) identified Competencies in the area of Resources, Interpersonal, Information, Systems, and Technology; and foundation skills in the areas of Basic Skills, Thinking Skills, and Personal Qualities. This course is part of a program in which each of these Competencies and skills are integrated. The specific SCANS Competencies that are recognized throughout this course are noted at the end of the appropriate Competencies or task listed.