



INSTRUCTIONAL PACKAGE

DMS 136

Introduction to Vascular Ultrasound

202230

Summer 2023

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: 202230

COURSE PREFIX: DMS 136

COURSE TITLE: Introduction to Vascular Ultrasound

CONTACT HOURS: 3

CREDIT HOURS: 1

RATIONALE FOR THE COURSE:

DMS 136 is an introductory course to sonographic evaluation of vessels within the body.

COURSE DESCRIPTION:

This course is an introduction to sonographic evaluation of the blood vessels to include types of studies performed and basic scanning techniques for peripheral vascular ultrasound.

PREREQUISITES/CO-REQUISITES: DMS 115, 137, and 200

***Online/Hybrid** courses require students to complete the DLI Online Student Orientation prior to completing an online course. The DLI Online Student Orientation can be found in WaveNet, under the My Student tab.

REQUIRED MATERIALS:

Please visit the [BOOKSTORE](#) online site for most current textbook information. Use the direct link below to find textbooks.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS:

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's learning management system (LMS) used for course materials.
Access to myHGTC portal for student self-services.
College email access – this is the college's primary official form of communication.

STUDENT IDENTIFICATION VERIFICATION:

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit [Online Netiquette](#).

Part II: Student Learning Outcomes

- Define the major components of the vascular system
- Describe vascular sonographic procedures utilized in the ultrasound departments.
- Identify the ultrasound findings of abnormal examination
- Describe the capabilities and limitations of Doppler ultrasound in assessment of vascular disease
- Perform basic scanning of the vascular system

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Module #1

Materials Covered: Cerebrovascular Sonography

***Assessment(s):** Complete class review activity.
Unit Test

Learning Outcomes:

- List the essential components of a carotid duplex and transcranial doppler examinations
- Describe the normal waveform characteristics of the extracranial carotid vessels.
- Define common diagnostic criteria used to evaluate the carotid vessels.
- Describe pathology observed during carotid duplex exam.

Module #2

Materials Covered: Lower extremity vascular sonography

***Assessment(s):** Complete class review activity.
Unit Test

Learning Outcomes:

- Describe the ultrasound techniques used to image lower extremity arteries and venous scanning.
- Define normal image and Doppler characteristics of lower peripheral vessels.
- Identify abnormal lower extremity arterial and venous waveforms.
- Define clinical, etiological, anatomical, and pathophysiological conditions of the lower extremities vascular system.

Module #3

Materials Covered: Upper extremity vascular sonography

***Assessment(s):** Complete class review activity.
Unit Test

Learning Outcomes:

- Describe the ultrasound techniques used to image upper extremity arteries and venous scanning.
- Define normal image and Doppler characteristics of upper extremity peripheral vessels.
- Identify abnormal upper extremity arterial and venous waveforms.

Module #4**Materials Covered:** Abdominal Pelvic Doppler***Assessment(s):** Complete class review activity.
Unit Test**Learning Outcomes:**

- Identify normal abdominal vascular anatomy.
- Describe normal Doppler waveforms of abdominal vessels.
- List Sonographic protocols for assessment of abdominal vessels.
- Relate common pathologies found during sonographic examination of abdominal vasculature.
- List diagnostic criteria used for defining abdominal vascular pathology.

Module #5**Materials Covered:** Vascular Disorders***Assessment(s):** Complete class review activity.
Unit Test**Learning Outcomes:**

- Describe the ultrasound techniques used to image upper extremity arteries and venous scanning.
- Define normal image and Doppler characteristics of upper extremity peripheral vessels.
- Identify abnormal upper extremity arterial and venous waveforms.

****Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.***

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*:

Students’ performance will be assessed and the weight associated with the various measures/artifacts are listed below.

- Quizzes
- Tests
- Discussion assignments
- Lab Image assignments
- Final Exam

EVALUATION*

Tests	40%
Assignments	40%
Final Exam	<u>10%</u>
	100%

****Students, for the specific number and type of evaluations, please refer to the Instructor’s Course Information Sheet.***

GRADING SYSTEM:

Students will be evaluated testing, classroom activities, homework assignments and projects. Grades will be calculated using the total point system with the percentage of points at:

92 – 100	A
83 – 91	B
74– 82	C
65 – 73	D
64 and below	F

This is a major area course and requires a grade of “C” or better.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the [academic calendar](#) for deadlines for add/drop. You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, and if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources



THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

The SSTC offers to all students the following **free** resources:

1. **Academic tutors** for most subject areas, **Writing Center support**, and **college success skills**.
2. Online **tutoring** and academic support resources.
3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the [Student Success & Tutoring Center](#) website for more information. To schedule tutoring, contact the SSTC at ssc@hgtc.edu or self-schedule in the Penji iOS/Android app or at www.penjiapp.com. Email ssc@hgtc.edu or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the [Online Resource Center](#) to access on-demand resources.



STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following free resources:

1. **Getting around HGTC:** General information and guidance for enrollment, financial aid, registration, and payment plan support!
2. Use the [Online Resource Center \(ORC\)](#) including Office 365 support, password resets, and username information.
3. **In-person workshops, online tutorials and more services** are available in Desire2Learn, Student Portal, Degree Works, and Office 365.
4. **Chat with our staff on TECH Talk**, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552.

Visit the [Tech Central](#) website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324), Option #1.



HGTC LIBRARY:

Each campus location has a library where HGTC students, faculty, and staff may check out materials with their HGTC ID. All three HGTC campus libraries are equipped with computers to support academic research and related school work; printing is available as well. Visit the [Library](#) website for more information or call (843) 349-5268.

STUDENT TESTING:

Testing in an **online/hybrid** course and in **make-up exam** situations may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms (which may have a fee associated with the usage)

Furthermore, tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through our online proctoring service. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

DISABILITY SERVICES:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC's [Accessibility and Disability Service webpage](#). The Accessibility and Disability staff will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

TITLE IX REQUIREMENTS:

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college's Chief Student Services Officer, campus law enforcement, or with the college's Title IX Coordinator, or designee.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

INQUIRIES REGARDING THE NON-DISCRIMINATION/TITLE IX POLICIES:

Student and prospective student inquiries concerning Section 504, Title II, Title VII, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.

Dr. Melissa Batten, VP Student Affairs

Title IX, Section 504, and Title II Coordinator

Building 1100, Room 107A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5228

Melissa.Batten@hgtc.edu

Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.

Jacquelyne Snyder, VP Human Resources

Affirmative Action/Equal Opportunity Officer and Title IX Coordinator

Building 200, Room 205B, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5212

Jacquelyne.Snyder@hgtc.edu