



# **INSTRUCTIONAL PACKAGE**

DMS 126  
Advanced Sonographic Topics

202010  
Fall 2020

# INSTRUCTIONAL PACKAGE

## Part I: Course Information

Effective Term: 202010

COURSE PREFIX: DMS 126

COURSE TITLE: Advanced Sonographic Topics

CONTACT HOURS: 4

CREDIT HOURS: 2

### **RATIONALE FOR THE COURSE:**

This course will emphasize normal anatomy, scanning techniques and pathology related to conditions and disease processes of the thyroid, breast, scrotum, pediatric, musculoskeletal organs and circulatory system and will aid in preparation for clinical technique and registry review.

### **COURSE DESCRIPTION:**

This course is a detailed study of the abdomen, superficial structures and neurosonography with emphasis on the anatomy, physiology, and pathological conditions seen with sonographic imaging.

### **PREREQUISITES/CO-REQUISITES: DMS 122**

\***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 student portal for course materials.  
WaveNet and D2L email access.

### **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**

- Recognize and identify normal sonographic appearance of anatomic structures within the musculoskeletal system and superficial regions.
- Examine anatomic variants of normal and abnormal Doppler patterns seen during musculoskeletal system and superficial regions.
- Identify and distinguish abnormal disease processes, pathology, and pathophysiology related to sonographic procedures of musculoskeletal system and superficial regions.
- Differentiate and compare inflammatory, traumatic, neoplastic, infectious, obstructive, congenital metabolic and immunologic disorders seen in ultrasound studies.
- Record and obtain adequate history and physical examination.
- Examine all related imaging, laboratory, and procedures pertinent to ultrasound exams of small parts, pediatric and musculoskeletal.
- Preparation to sit for the national abdominal board examination.

## **COURSE LEARNING OUTCOMES and ASSESSMENTS\*:**

**Module # 1****Materials Covered:** Sonographic Evaluation of the Breast

\*Chapter 21 - Hagen Ansert Textbook

**\*Assessment(s):** Complete Workbook activities  
Unit Test**Learning Outcomes:**

- Recognize and identify the Sonographic appearance of normal anatomic structures of the breast.
- Examine anatomic variants of normal and abnormal found in the breast.
- Identify and distinguish abnormal disease processes, pathology, and pathophysiology of the breast.
- Differentiate and compare inflammatory, traumatic, neoplastic, infectious, obstructive, congenital metabolic and immunologic disorders seen in abdominal ultrasound studies involving the breast.
- Record and obtain adequate history and physical examination related to the breast.

**Module # 2****Materials Covered:** Thyroid Sonography

\*Chapter 22 - Hagen Ansert Textbook

**\*Assessment(s):** Complete Workbook activities  
Unit Test**Learning Outcomes:**

- Recognize and identify the Sonographic appearance of normal anatomic structures of thyroid and surrounding structures.
- Examine anatomic variants of normal and abnormal found in the thyroid and surrounding structures.
- Identify and distinguish abnormal disease processes, pathology, and pathophysiology of the thyroid and surrounding structures.
- Differentiate and compare inflammatory, traumatic, neoplastic, infectious, obstructive, congenital metabolic and immunologic disorders seen in abdominal ultrasound studies involving the thyroid and surrounding structures.
- Record and obtain adequate history and physical examination related to the thyroid and surrounding structures.

**Module # 3****Materials Covered:** Sonographic Evaluation of the Male Pelvis

\*Chapter 23 - Hagen Ansert Textbook

**\*Assessment(s):** Complete Workbook activities  
Unit Test**Learning Outcomes:**

- Recognize and identify the Sonographic appearance of normal anatomic structures of the scrotum, testicles and prostate.
- Examine anatomic variants of normal and abnormal found in the scrotum, testicles and prostate.
- Identify and distinguish abnormal disease processes, pathology, and pathophysiology of the scrotum, testicles and prostate.
- Differentiate and compare inflammatory, traumatic, neoplastic, infectious, obstructive, congenital metabolic and immunologic disorders seen in abdominal ultrasound studies involving the scrotum, testicles and prostate.
- Record and obtain adequate history and physical examination related to scrotum, testicles and prostate pathology.

**Module # 4****Materials Covered:** Pediatric Sonography

\*Chapter 27-29 - Hagen Ansert Textbook

**\*Assessment(s):** Complete Workbook activity  
Unit Test**Learning Outcomes:**

- Describe normal anatomy, embryology and sonographic appearance of the neonatal and infant brain and spine.
- Explore common pathologic conditions of the neonatal and infant brain and spine.
- Explain clinical indications for sonographic evaluation of brain and spine in pediatric patients.
- Describe sonographic technique, procedure and protocols used in evaluation of neonatal brain and spine.
- Describe the anatomic structures of hip joint
- Describe the indications and sonographic techniques for assessment of the infant and pediatric hip
- Discuss pathological conditions of the hip.

## **Module # 5**

**Materials Covered:** Musculoskeletal Sonography  
\*Chapter 37, 38 and 24 - Hagen Ansert Textbook

**\*Assessment(s):** Complete Workbook activity  
Unit Test

### **Learning Outcomes:**

- Identify normal anatomic location and function of tendons, ligaments, muscles, nerves and bursae.
- List indications for musculoskeletal sonographic evaluation.
- Describe exam techniques and basic musculoskeletal protocols.
- Summarize basic protocols for musculoskeletal examinations.
- Describe common pathologic processes seen in musculoskeletal imaging.

## **Module #6**

**Materials Covered:** Abdominal Doppler

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

### **Learning Outcomes:**

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

## **Case Study Project**

### **Learning Outcomes:**

- Apply academic knowledge in a professional setting.
- Demonstrate mastery of specific program knowledge/skills.

### **\*Course Assessments:**

- Presentation of clinical case study of pertinent abdominal pathology seen during clinical rotation including all pertinent history, studies and information with images of actual exam.

***\*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.

#### **EVALUATION\***

Tests	40%
Assignments	20%
Case Study	20%
Final Exam	<u>20%</u>
	100%

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

#### **GRADING SYSTEM:**

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 appointments using TutorTrac, visit the Student Services tab in WaveNet. Email [sstc@hgtc.edu](mailto:sstc@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.



### CENTRAL 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!
2. Use the [Online Resource Center \(ORC\)](#) including scheduled technology training, Office 365 support, password resets, and username information.
3. **Drop-in technology support or scheduled training** in the Center or in class.
4. **In-person workshops, online tutorials and more services** are available.



5. **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).

## **STUDENT TESTING:**

Testing in an **online/hybrid** course may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms

Further more 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 RPNOW, 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, 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 Coordinator*

Building 1100, Room 107A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5228

[Melissa.Batten@hgtc.edu](mailto: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**

*EEO and Title IX Coordinator*

Building 200, Room 212A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5212

[Jacquelyne.Snyder@hgtc.edu](mailto:Jacquelyne.Snyder@hgtc.edu)