

# INSTRUCTIONAL PACKAGE

# DMS 167

# Imaging Practicum

201910 Fall/2019

## **INSTRUCTIONAL PACKAGE**

## **Part I: Course Information**

Effective Term: 201910

COURSE PREFIX: DMS 167 COURSE TITLE: Imaging Practicum

CONTACT HOURS: 24 CREDIT HOURS: 8

### RATIONALE FOR THE COURSE:

DMS 167 is a supervised clinical education experience designed to continue the student's development of ultrasound scanning skills and techniques. This course will provide a continuation of practice with active participation in the off campus clinical sonography environment. Upon completion, students should be able to image, process and evaluate all Sonographic examinations conducted in a general ultrasound lab. Successful completion of this course will complete a student's training for the entry level Sonographer position.

### **COURSE DESCRIPTION:**

This course is a supervised clinical experience and practice designed to continue and advance the student's ultrasound scanning skills and techniques. This clinical course also provides an opportunity for students to explore advancements in Sonography.

### PREREQUISITES/CO-REQUISITES: DMS 166

#### **REQUIRED MATERIALS:**

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks.

BOOKSTORE.

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

### **ADDITIONAL REQUIREMENTS:**

HGTC Diagnostic Sonography Clinical Student Handbook Medical Imaging Sciences Student Handbook

#### **TECHNICAL REQUIREMENTS:**

Trajecsys online record keeping system access Access to Desire2Learn (D2L), HGTC's student portal for course materials. WaveNet and D2L email access.

### **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 <u>Online</u> <u>Netiquette</u>.

## Part II: Student Learning OutcomesCOURSE LEARNING OUTCOMES and ASSESSMENTS\*:

UPON COMPLETION OF THIS COURSE THE STUDENT SHOULD ABLE TO:

- Participate effectively in the DMS Department
- Interact effectively with the supporting departments
- Implement practice of the DMS Professional Code of Ethics
- Demonstrate Personal and Professional Growth and Development
- Demonstrate Continued Clinical Progression
- Demonstrates Competency in all areas of the Ultrasound Department
- Demonstrates the qualifications of an entry-level Sonographer

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

## **General Education Outcomes**

This course fulfills the following General Education Outcomes through the Professional Development Evaluation. Upon completion of this course, students will be able to:

Communicate effectively;

\_\_\_\_\_Think critically;

Self and professional development.

#### Module 1

#### Learning Outcome: Utilize oral and written communication

- 1. Maintain accurate clinical records;
- 2. Obtain and evaluate pertinent patient history and physical findings
- 3. Interact with the interpreting physician or other designated physicians with oral or written summary of findings as permitted by employer policy and procedure
- 4. Recognize significant clinical information and historical facts from the patient and the medical records, which may impact the diagnostic examination;
- 5. Comprehend and employ appropriate medical terminology, abbreviations, symbols, terms, and phrases; and
- 6. Educate other health care providers and the public in the appropriate applications of ultrasound and other diagnostic vascular evaluation, including the following:
- 7. Interact with radiologist with oral and written summary of findings.

#### \*Course Assessments:

- Completed Competency Evaluations
- Professional Development evaluations
- Overall Evaluation of the Student's clinical skills

#### Module 2

#### Learning Outcome: Provide basic patient care and comfort

- 1. Provide basic patient care and comfort.
- 2. Anticipate and respond to the needs of the patient
- 3. Demonstrate age related competency and respond to parental needs.
- 4. Maintain infection control and utilize standard precautions;
- 5. Anticipate and be able to respond to the needs of the patient;
- 6. Demonstrate age related competency (i.e., neonates, pediatric patients, adolescents, adults, and Obstetric patients)
- 7. Respond appropriately to parental needs
- 8. Recognize when sedation may be appropriate
- 9. Demonstrate appropriate care in nursery and intensive care environments (ancillary equipment, thermal, central venous lines, ET tubes, respiratory needs)
- 10. Use proper patient positioning

#### \*Course Assessments:

- Completed Competency Evaluations
- Professional Development evaluations
- Overall Evaluation of the Student's clinical skills

#### Module 3

## *Learning Outcome: Demonstrate knowledge and understanding of physiology, pathology, and pathophysiology.*

- 1. Demonstrate anatomic structures in the region of interest.
- 2. Recognize the sonographic appearance and patterns of normal tissue structures.
- 3. Extend standard diagnostic testing protocol as required by patient history or initial findings;
- 4. Recognize examination findings that require immediate clinical response and notify the interpreting physician of such findings, including the following:
- 5. Utilize proper sonographic examination techniques
- 6. Demonstrate diagnostic protocols related to specific site guidelines and disease conditions.
- 7. Physiology including blood flow dynamics
- 8. Recognize and document pertinent pathology and pathophysiology
- 9. Development of professional etiquette with staff and patients.
- 10. Demonstration of proficient directly supervised performance of ultrasound examinations performed at clinical rotation site
- 11. Demonstrate mastery of specific ultrasound protocols
- 12. Identify specific image evaluation criteria and anatomy for completed images specific to learned procedures.

#### \*Course Assessments:

- Completed Competency Evaluations
- Professional Development evaluations
- Overall Evaluation of the Student's clinical skills

#### Module 4

## Learning Outcome: Demonstrate knowledge and understanding of acoustic physics, Doppler ultrasound principles and ultrasound instrumentation.

- 1. Select the appropriate technique(s) for examination(s) being performed;
- 2. Adjust instrument controls to optimize image quality;
- 3. Perform linear, area, circumference, and other related measurements from sonographic images or data;
- 4. Recognize and compensate for acoustical artifacts
- 5. Minimize patient exposure to acoustic energy
- 6. Apply basic concepts of acoustic physics which include the following:
  - **Operator control options**
  - Physics of Doppler
  - Acoustic artifacts
- 7. Explore emerging technologies in the clinical setting.

#### \*Course Assessments:

- Completed Competency Evaluations
- Professional Development evaluations
- Overall Evaluation of the Student's clinical skills

#### Module 5

#### Learning Outcome: Employ professional judgment and discretion.

- 1. Protect the patient's right to privacy based on current federal standards and regulations.
- 2. Maintain confidentiality of all patients.
- 3. Adhere to the professional codes of conduct/ethics through the following:

#### \*Course Assessments:

- Completed Competency Evaluations
- Professional Development evaluations

#### Module 6 Learning Outcome: Ergonomics

1. Demonstrate and employ, ergonomically correct scanning techniques with equipment adjustment and patient positioning.

#### \*Course Assessments:

• Clinical Visit Summary

#### Module 7 Learning Outcome: Capstone

1. Demonstrates Continued Clinical Progression

#### \*Course Assessments:

Complete Abdominal Sonographic evaluation

## **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. Each student is required to complete the following which will be evaluated for the clinical grade:

- Remaining Competencies performed
  - Minimum of 2 competencies are required by the start of the 6<sup>th</sup> week (student must have completed all required competencies prior to start of Advanced competencies)
  - $\circ$  4 Advanced competencies due by the start of the 10<sup>th</sup> week

25%

- Overall Evaluation due at end of each site rotation
- Monthly Professional Developments evaluations
- Daily Clinical Patient Log Records: due weekly
- Scanning Test Capstone
- Total Exam Sheets

| EVALUATION*    |  |
|----------------|--|
| Comps          |  |
| Advanced Comps |  |

| Advanced Comps | 40%        |
|----------------|------------|
| Evaluations    | 10%        |
| Capstone exam  | <u>25%</u> |
|                | 100%       |

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

#### **GRADING SYSTEM:**

| 100-96% | A-4 quality points |
|---------|--------------------|
| 95-90%  | B-3 quality points |

| 89-84%       | C-2 quality points |
|--------------|--------------------|
| 83-80%       | D-1 quality point  |
| 79% or below | F-0 quality points |

4 points- Excellent-Outstanding Performance
3 points- Consistently Good Performance
2 points- Satisfactory performance with minor corrections
1 point- Poor Performance, needs marked improvement, no initiative
0 point- Non-performance

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 (<u>ACADEMIC CALENDAR</u>). 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, 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 coaches for most subject areas, Writing Center Support, and college success skills.
- 2. On-line student success and academic support resources.

Visit the SSTC website: <u>Student Success & Tutoring Center</u> and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455 or go to the <u>Online Resource Center</u> to access on-demand resources any time.



## Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

- 1. Getting around HGTC: General information and guidance for enrollment!
- Use the <u>Online Resource Center (ORC)</u> for COMPASS support, technology education, and online tools.
- 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.

Visit the WNC website: <u>Wavenet Central</u>. Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

## **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 <u>Online Testing</u> 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 Beth Havens, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals 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.

Inquiries regarding the non-discrimination policies: Students 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. 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, Section 504, Title II, and Title IX Coordinator, Building 200, Room 212A, Conway Campus, PO Box 261966, Conway, SC 29528-6066, 843-349-5212, Jacquelyne.Snyder@hgtc.edu.

#### **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-<br>discrimination policies:   |  |
|--|--|
| Student and prospective student inquiries<br>concerning Section 504, Title II, and Title IX<br>and their application to the College or any<br>student decision may be directed to the Vice<br>President for Student Affairs. | Employee and applicant inquiries concerning<br>Section 504, Title II, and Title IX and their<br>application to the College may be directed to<br>the Vice President for Human Resources. |
| Dr. Melissa Batten, VP Student Affairs   | Jacquelyne Snyder, VP Human  |
| Title IX Coordinator   | Resources  |
|  | Section 504, Title II, and Title IX Coordinator  |
| Building 1100, Room 107A, Conway   | Building 200, Room 212A, Conway Campus   |
| Campus   | PO Box 261966, Conway, SC 29528-   |
| PO Box 261966, Conway, SC 29528-   | 6066   |
| 6066   | 843-349-5212   |
| 843-349-5228   | <u>Jacquelyne.Snyder@hatc.edu</u>  |
| <u>Melissa.Batten@hgtc.edu</u> _   |  |