

**Course Prefix/Number/Title:** DMS-221L Abdominal Ultrasound I Lab

**Number of Credits:** 1 semester credit

**Course Description:**

This course is a hands-on sonographic scanning lab that focuses on the knowledge, skills and techniques for acquisition of anatomy and sonographic protocols and image optimization of the upper abdominopelvic cavity. Demonstrated scanning protocols will include imaging of the aorta, celiac trunk, superior mesenteric and iliac arteries, kidneys, bladder as visualized by sonography. Color and spectral Doppler applications will also be applied to the appropriate anatomy. This course is integrated with DMS-221, the didactic study of the anatomy, physiology, pathology and pathophysiology of the organs of the abdominopelvic cavity, aorta, IVC, celiac trunk, SMA, peritoneum and diaphragm as visualized by sonography.

**Pre-requisites:** DMS-201

**Corequisites:** DMS-221

**Instructor:** Amy Hofmann

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

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

**Phone:** 857-5620

**Email:** [amy.hofmann@trinityhealth.org](mailto:amy.hofmann@trinityhealth.org)

**Lecture Schedule:** 12:00 – 2:00 pm Wed. September 20 to December 17 in Suite 301

**Lab Schedule:** 8:30 – 10:30 pm MW September 20 to November 1 in Suite 301

**Textbook:** Diagnostic Sonography, Hagen-Ansert, 8<sup>th</sup> Edition

**Lab Manual:** Trinity Health Clinical Education Handbook

**Course Requirements:**

Grading is based on completion of assignments, quizzes and test.

Assignments 15%

Quizzes 15%

Test 70%

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/she must notify the Program Director prior to absence to plan for makeup time and activities.

### Grading Criteria

A = 94-100% of the total points  
B = 87 - 93% of the total points  
C = 80 - 86% of the total points  
F = <79% of the total points

### Tentative Lab Outline:

| <u>WEEK</u> | <u>ACTIVITY</u>   | <u>QUIZ/TEST/ASSIGN</u>              |
|-------------|---|--------------------------------------|
| 9/20        | Aorta Power Point Presentation<br>Aorta and Iliac Artery Scanning |                                      |
| 9/27        | Iliac Artery, Renal and Bladder Scanning                          | Aorta model 29th                     |
| 10/4        | Renal Scanning, Aorta Protocol                                    | Aorta Protocol Quiz 6th              |
| 10/11       | Aorta Protocol; power Point Urinary System                        | Aorta Imaging Assignment             |
| 10/18       | Kidney, aorta, bladder, pancreas, spleen scanning                 |                                      |
| 10/25       | Renal protocol  | Renal protocol Quiz 25 <sup>th</sup> |
| 11/1        | Renal protocol  |                                      |
| 11/3        | Renal <b>Lab Assessment</b>                                       | Renal Imaging Assignment             |
| 11/8        | Final Test Abdomen I  | Final Test                           |

### Course Goal and Objectives

Goal:

The goal of this course is to introduce the sonography student to the basics of ultrasound imaging techniques used in abdominal scanning, identify abdominal organ anatomy in the transverse and longitudinal planes

Objectives:

1. Describe scanning techniques and protocols used in abdominal scanning.
2. Identify abdominal sectional anatomy in transverse and longitudinal planes.
3. Explain terminology used to describe the results of normal ultrasound examinations.
4. Define the criteria for an adequate diagnostic abdominal ultrasound examination.
5. Describe renal function tests and their relevance to disease.
6. List sonographic features for aortic and renal pathology discussed in course.
7. Describe the normal sonographic pattern of the aorta, bladder, and kidneys.
8. Describe abnormal sonographic patterns of the aorta, bladder, and kidneys discussed in this course.

**Student Learning Outcomes:** This course **is / is not** (circle one) used in assessment of the Student Learning Goals and Outcomes for general sonography.

SLO 3.1 Student will demonstrate professional behavior in the classroom and clinical setting by treating others with dignity, respect and compassion

SLO 4.2 Students will exhibit quality patient care.

## **General Education (GE) Goal and Objectives**

Not applicable

## **Relationship to Campus Theme:**

This course addresses a DMS Program theme by developing the knowledge and psychomotor scanning skill sets necessary to perform abdominal sonography utilizing the protocols and techniques that are currently used in sonographic imaging.

## **Classroom Policies**

1. Cell phones and related devices are prohibited in the classroom at all times. It is recommended that you do not bring your cell phone or other electronic devices into the classroom or, at the very least, turn it off.
2. Food and beverages are permitted in accordance with classroom policy.
3. Be respectful of other students, instructors, and guests.

## **Student Email Policy**

Trinity Health is increasingly dependent upon email as an official form of communication. A student's assigned email address will be the only one recognized for official mailings. The liability for missing or not acting upon important information conveyed via Trinity Health DMS Program email rests with the student.

## **Academic Integrity**

All students are expected to adhere to the highest standards of academic integrity. Dishonesty in the classroom or laboratory and with assignments, quizzes and exams is a serious offense and is subject to disciplinary action by the Program Director. For more information, refer to the DMS Program Handbook policies.

## **Disabilities and Special Needs**

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact the Program Director (701-857-5620) as early as possible during the beginning of the semester.