



Course Prefix/Number/Title: DMS-222L Abdominal Ultrasound II Lab

Number of Credits: 1 semester credit

Course Description:

This course is a hands-on sonographic scanning lab, the continuation study of the anatomy, physiology, pathology and pathophysiology of the upper abdominal cavity, peritoneal cavity to include the liver, biliary tree, aorta, IVC, celiac trunk, SMA, gastrointestinal organs, abdominal wall, peritoneum and diaphragm as visualized by sonography. Discussion and demonstration will include the application of Doppler principles, paracentesis and thoracentesis procedures. This course is integrated with DMS-222, focusing on the knowledge, skills and techniques for acquisition of appropriate sonographic protocols and image optimization of the abdomen. Color and spectral liver and abdominal Doppler applications will also be applied to appropriate anatomy.

Pre-requisites: DMS-221, DMS-221L

Corequisites: DMS-222, DMS-211, DMS-232, DMS-232L, DMS-282

Instructor: Amy Hofmann

Office: Suite 302 5th Ave Building, Trinity Health

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

Phone: 857-5620

Email: amy.hofmann@trinityhealth.org

Lecture Schedule: 12:30 – 2:30 pm Wed. January 10 to May 13 in Suite 301

Lab Schedule: 8:30 – 10:30 am MW January 10 to May 13 in Suite 301

Textbook: Diagnostic Sonography, Hagen-Ansert, 8th 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>TOPIC/ACTIVITY</u>	<u>QUIZ/TEST/ASSIGNMENT</u>
1/10	Gallbladder Lecture Ppt	
1/17	Gallbladder and Biliary System	Biliary/GB <u>Assignment 1</u>
1/24	Gallbladder and Common Bile Duct	Assignment 1 Due
1/31	Liver Lecture Ppt	
2/7	Liver A & P; liver handout assignment 2	Liver <u>Assignment 2</u>
2/14	Liver Protocol	Quiz 1 -Liver Protocol Liver Assignment 2 Due <u>Liver Image PPoint Due</u>
2/21	Liver cont.	
2/28	Spleen/Pancreas Lecture	
3/7	Abdomen Complete Ppt	
3/14	March 14-18 Spring Break	
3/21	Abdomen Complete Scanning	
3/28	Abdomen Complete Scanning	Quiz 2 -Abd Comp Protocol <u>Abd Comp Image Ppt Due</u>
4/4	Abdomen Complete Scanning	Lab Assessment
4/11	Abdomen Complete Lab Assessment	
4/18	Liver Doppler Lecture Ppt	
4/25	Liver Doppler Scanning	Quiz 3 -LiverDopplerProtocol <u>Liver Doppler Image Ppt Due</u>
5/2	Liver Doppler	<u>Abd II Lab Final Test</u>
5/4	Test	
5/9	Make up time if needed	

Course Goal and Objectives

Goal:

The goal of this course is to introduce the sonography student to the ultrasound imaging techniques used in abdominal vascular scanning, identify gastrointestinal and abdominal organs and cavities, identify the anatomy in the transverse and longitudinal planes as well as introduce ultrasound guided interventional procedures.

Objectives:

1. Describe scanning techniques and protocols used in abdominal, liver, biliary and abdominal vascular scanning.
2. Explain terminology used to describe the protocol and procedural steps of ultrasound imaging of liver, liver Doppler and abdomen.
3. Describe the anatomy and relational landmarks of the abdomen.

4. Define the criteria for adequate, diagnostic ultrasound examinations of major abdominal organs to include the liver and liver Doppler.
5. List the clinical signs and sonographic features for pathology discussed in 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 1.1 Student will be able to formulate effective technical factors based on patient body habitus, physical limitations, pathology and equipment limitations.

SLO 2.1 Students will demonstrate effective oral communication skills to articulate appropriate patient information.

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.