

**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:** None

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

**Course 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.

**Instructor:** Keshia Gathman/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:** 10:30 – 12:30 pm Wed. January 10 to May 10 in Suite 301

**Lab Schedule:** 8:30 – 10:30 am MW January 10 to May 10 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>TOPIC/ACTIVITY</u>	<u>QUIZ/TEST/ASSIGNMENT</u>
1/8	Gallbladder Lecture Ppt	
1/15	Gallbladder and Biliary System	Biliary/GB <u>Assignment 1</u>
1/22	Gallbladder and Common Bile Duct	
1/29	Liver Lecture Ppt, liver handout assignment 2	
2/5	Liver A & P	<u>Liver Assignment 2</u>
2/12	Liver Protocol	<b>Quiz 1</b> -Liver Protocol
2/19	Liver cont.	<u>Liver Image PPoint Due</u>
2/26	Liver cont.	
<b>3/4</b>	<b>March 4-8 Spring Break</b>	
3/11	Abdomen Complete Ppt	
3/18	Abdomen Complete Scanning	
3/25	Abdomen Complete Scanning	<b>Quiz 2</b> -Abd Comp Protocol
4/1	Abdomen Complete Scanning	<u>Abd Comp Image Ppt Due</u>
4/8	Abdomen Complete <b>Lab Assessment</b>	<b>Lab Assessment</b>
4/15	Liver Doppler Lecture Ppt	
4/22	Liver Doppler Scanning	<b>Quiz 3</b> -LiverDopplerProtocol
4/29	Liver Doppler	<u>Liver Doppler Image Ppt Due</u>
5/6	<b>Test</b>	Abd II Lab <b>Final Test</b>

### CTE Competency/Department Learning Outcome(s):

CTE Competency #1: Employ industry-specific skills in preparation for workplace readiness

Learning outcome #1 – Students will be able to formulate effective technical factors based on patient body habitus, pathology and equipment limitations. SLO 1.1

Learning outcome #2 – Students will demonstrate effective written communication skills to articulate appropriate patient information SLO 2.1

### **Relationship to Campus Focus:**

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.

### **Title IX:**

Dakota College at Bottineau, Minot State University and Trinity Health DMS faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.