DAKOTA COLLEGE AT BOTTINEAU

COURSE SYLLABUS

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

Number of Credits: 2 semester credits

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

Pre-requisites: DMS-221
Corequisites: DMS-222L, 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 pm 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 Lecture Outline:

WEEK	TOPIC	READING
1/10	gallbladder, biliary system	Chpt 10
1/17	biliary pathology	
1/24	Liver anatomy, physiology, pathology	Chpt 9
1/31	continued	
2/7	continued	
2/14	Liver Doppler	Chpt 8
2/21	Pancreas, spleen sonography review	Chpt 11,12
2/28	Right Upper Quadrant (RUQ) sonography	
3/7	Review / testing	
3/14	**March 14-18 Spring Break**	
3/21	Abdominal vascular anatomy	Chpt 8
3/28	Gastrointestinal System	Chpt 13
4/4	retroperitoneum	Chpt 16
4/11	Abdominal pelvic wall, peritoneal cavity	Chpt 14
4/18	Interventional, Image guided invasive procedures	Chpt 18
4/25	Urgent ultrasound procedures	Chpt 19
	Organ Transplant sonography	Chpt 20
5/2	Review / testing	
5/9	Final testing	

Course Goal and Objectives

Goal:

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

Objectives:

1. Describe scanning techniques and protocols used in liver, biliary and abdominal vascular scanning.
2. Explain terminology used to describe the protocol and procedural steps of ultrasound guided interventional and invasive examinations.
3. Describe the anatomy and relational landmarks of the gastrointestinal tract.
4. Define the criteria for adequate, diagnostic abdominal, vascular and gastrointestinal tract ultrasound examinations.
5. List the clinical signs and sonographic features for pathology discussed in course.
6. Describe the advantages of ultrasound-guided procedures.
7. List potential complications of ultrasound-guided interventional techniques.

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, abdominal vascular sonography and image guided invasive procedure imaging, 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.