DAKOTA COLLEGE AT BOTTINEAU

COURSE SYLLABUS

Course Prefix/Number/Title: DMS 223 Abdominal Extended Sonography III

Number of Credits: 2 semester credits

Course Description: This course is the study of the anatomy, physiology, pathology and pathophysiology of superficial tissue to include the thyroid, parathyroid, scrotum, prostate, breast and ultrasound guided interventional techniques of related tissues. Sonography of transplanted organs will be discussed. Sonographic vascular imaging of related organs will be studied, including the application of Doppler imaging principles where appropriate. Associated Lab learning assignments and outcomes are specified in the DMS 223L, Abdominal Extended Sonography Lab III syllabus.

Pre-requisites: DMS 222, DMS 222L
Corequisites: DMS 223L

Course Objectives:
The goal of this course which is integrated with DMS 223L, focuses on the knowledge, skills and techniques for acquisition of appropriate sonographic protocols and image optimization of the thyroid, scrotum, prostate, breast, and ultrasound guided interventional techniques. Color and spectral Doppler applications will also be applied to the appropriate anatomy.

Objectives:
1. Describe appropriate indications for the use of ultrasound in superficial/extended tissue.
2. Describe scanning techniques and protocols used in superficial tissue scanning.
3. Identify superficial tissue sectional anatomy in transverse and longitudinal planes.
4. Describe the anatomy and relational landmarks of the associated anatomy
5. Explain and describe the results of normal/abnormal ultrasound examinations.
6. Define criteria for an adequate diagnostic ultrasound examination of related anatomy and pathology.
7. Define the criteria for adequate diagnostic imaging and Doppler evaluation of vascular structures of superficial tissue ultrasound examinations.
8. Describe laboratory and diagnostic testing and their relevance to superficial tissue pathology.
9. List the clinical signs and sonographic features for pathology discussed in course.
10. Describe ultrasound-guided interventional techniques and protocols.
11. Discuss the sonographic appearances and techniques applied in imaging transplanted organs.
12. List the clinical signs and sonographic features for pathology discussed in course.
13. Describe advantages of ultrasound-guided procedures.
14. List potential complications of ultrasound-guided interventional techniques.

Instructor: Amy Hofmann

Office: 5th Floor Medical Arts Clinic, Trinity Health

Office Hours: 3:00-5:00 pm M-Th and by appointment

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Lecture/Lab Schedule: 9:00-3:00 pm Tu, September 22 to December 15, MAC Skywalk Rm A

Textbook: Diagnostic Sonography, Hagen-Ansert, 9th Edition; Workbook Diagnostic Sonography, Hagen-Ansert, 9th 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:

Date	Topic/Scanning	Assignment/Quiz/Test
9/23	Scrotum anatomy and physiology	Read Ch 23 Hagen-Ansert **Complete** Ch 23 Workbook Exer 1-?
9/30	Scrotal scanning protocol and pathology	
10/7	Breast anatomy and physiology	Read Ch 21 Hagen-Ansert **Complete** Ch 21 Workbook Exer 1-?
10/14	Breast pathology	
10/21	Breast mammographic and sonographic Imaging techniques	
10/28	Thyroid and parathyroid anatomy and physiology	Read Ch 22 Hagen-Ansert **Complete** Ch 22 Workbook Exer 1-?
11/4	Thyroid pathology	
11/11	Thyroid sonographic technique	
11/18	Ultrasound guided interventional techniques	Read Ch 18 Hagen-Ansert **Complete** Ch 18 Workbook Exer 1-?
11/25	Ultrasound guided biopsy/fine needle aspiration continued	
12/2	Review liver and renal transplant organs	Review Ch 20 Hagen-Ansert

12/9	Review for final test	Review Ch 18, 20, 21, 22, 23,
12/16	Final Test	Final Test

CTE Competency/Department Learning Outcomes:
CTE Competency #1: Employ industry specific skills in preparation for workplace readiness.

Learning outcome #1 - Students will demonstrate critical thinking and problem-solving skills in the classroom and clinical setting. SLO 1.1
Learning outcome#2 - Students will demonstrate knowledge of normal superficial tissue anatomy and critically evaluate related sonographic images for diagnostic quality. SLO 1.2

Relationship to Campus Theme:
This course addresses a DMS Program theme by developing the knowledge and psychomotor scanning skill sets necessary to perform superficial tissue sonography, image guided invasive procedures and breast imaging, utilizing the protocols and techniques that are currently used in sonographic imaging.

Classroom Policies
1. Cell phones and related devices are monitored 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, get instructor permission to use approved devices as classroom learning resources.
2. Food and beverages are permitted in accordance with classroom policy.
3. Be respectful of other students, instructors, and guests.

Student Email Policy
The Dakota College at Bottineau campus community is increasingly dependent upon electronic communication among faculty, staff and students. A student's campus-assigned e-mail address will be the only one recognized by the campus for official mailings. The liability for missing or not acting upon important information conveyed via email because of a failure to access a campus-assigned e-mail address rests with the student. Additionally, student must provide Trinity Health DMS faculty with a personal email address for communication while in the program.

Academic Integrity
According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred. Additionally, dishonesty in the classroom or laboratory and with assignments, quizzes and exams is a serious offense and is subject to disciplinary action by the DMS Program Director. For more information, refer to the Trinity Health DMS Program Handbook policies.

Disabilities and Special Needs
Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor, DMS Program Director and Disability Support Services.

Title IX:
Dakota College at Bottineau (DCB) 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.

AI Student Policy:
Unless otherwise indicated in the course syllabus, or in individual instructions for course assignments, or in the absence of the express consent of the course instructor, students are not allowed to utilize generative AI to help produce any of their academic work. Any violation of this policy will be considered an act of academic dishonesty as outlined within the Dakota College Code of Student Life.

RESPONSIBILITIES

Students	• Responsible to follow the syllabus and assignment instructions regarding use of generative AI for all academic work. • Obtain permission of the instructor prior to the use of generative AI that is outside of the syllabus or assignment instructions. Provide appropriate rationale for how the use of generative AI will enhance the learning experience for the assignment. • In instances where generative AI is permissible, appropriately cite the generative AI program used and indicate where in the assignment it was used, in a brief submission statement.
Faculty	• Determine if the use of generative AI could enhance student learning in any assignment of project. • Clearly indicate in all course syllabi if generative AI is allowable for any academic work. • If allowable, give specific parameters for how and when generative AI may be used. • If a violation of generative AI for the individual course/syllabus is suspected, discuss the concern with the student. If violation is still suspected, inform the appropriate semester coordinator/program director.