DAKOTA COLLEGE AT BOTTINEAU

Course Syllabus

Course Prefix/Number/Title: DMS 224 Abdominal Ultrasound IV

Number of Credits: 2 semester credits

Course Description:
his course is the continuation study of the anatomy, physiology, pathology and pathophysiology of the abdomen with a focus on the knowledge, skills and techniques for acquisition of appropriate sonographic protocols and image optimization. Topic coverage will include the abdominal wall, cavities, gastrointestinal tract, neonatal brain, spine, hip and musculoskeletal sonographic techniques. Color and spectral Doppler applications will also be applied to the appropriate anatomy.

Pre-/Co-requisites: DMS 223, DMS 223L

Course Objectives:
1. Describe scanning techniques and protocols used in abdominopelvic cavity imaging.
2. Identify sonographic and cross-sectional anatomy and relational landmarks of the abdominopelvic region.
3. Define terminology used to describe the sonographic imaging of the gastrointestinal tract.
4. Describe criteria for adequate diagnostic imaging and Doppler evaluation of anatomical and vascular structures of abdominopelvic cavity ultrasound examinations.
5. List the clinical signs and sonographic features for pathology discussed in course.
6. Describe common, appropriate indications for the use of sonographic imaging of the hepatobiliary and urinary systems, pancreas, spleen, brain, spine and hip in pediatric procedures.
7. Describe scanning techniques and protocols used in pediatric abdomen, brain, spine and hip Imaging.
8. Describe scanning techniques and protocols used in musculoskeletal sonographic imaging.

Instructors: Amy Hofmann

Office: Suite Q5101 Medical Arts Clinic, Trinity Health

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

Phone: 701-857-5620

Email: amy.hofmann@trinityhealth.org

Lecture Schedule: 10:00 am - 12:00pm Tu in MAC Skywalk Classroom C

Lab Schedule: None

Textbook(s): Diagnostic Sonography, Hagen-Ansert, 9th Edition

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 Course Outline:

WEEK	TOPIC	READING/ACTIVITY
1/13	peritoneal cavity and abdominal wall	Ch 4 & 14
1/20	Peritoneum	Assignment 1 Ch 4
1/27	retroperitoneum	Ch 16
2/3	neonatal and pediatric abdomen	Quiz 1 Ch 14,16; Ch 25
2/10	neonatal and pediatric adrenal and urinary system	Assignment 2 Ch 25; Ch 26
2/17	cont.	Quiz 2 Ch 25
2/24	neonatal brain	Assignment 3 Ch 26; Ch 27
3/3	infant and pediatric hip	Quiz 3 Ch 26; Ch 28
3/10	March 10-14 SPRING BREAK	
3/17	neonatal and infant spine	Ch 29
3/24	musculoskeletal system (MSK)	Quiz 4 Ch 27, 29; Ch 24
3/31	review	Assignment 4 Ch 24
4/7	review and final test	
4/14	Comprehensive Review	
4/21	Comprehensive Review	
4/28	Comprehensive Review	
5/5	Comprehensive Review	
5/12	**Final Review and Testing**	

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 ability to critically evaluate completed images for diagnostic quality. SLO 1.2
Learning outcome #3 – 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 sonography of abdominopelvic cavity, gastrointestinal tract, neonatal abdominopelvic, spine, brain and hip 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:
Trinity Health/ Dakota College at Bottineau 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 or the College because of failure to access a campus-assigned e-mail address rests with the student. Additionally, the 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 or Special Needs:
Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

Title IX:
Trinity Health and affiliated college and university faculty, Dakota College at Bottineau (DCB) and Minot State University 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.

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.