



Course Prefix/Number/Title: DMS 233 Obstetric Sonography III

Number of Credits: 2 semester credits

# **Course Description**:

This course is the continued study of the anatomy, physiology, pathology and pathophysiology of the organs and structures of the fetus through the second and third trimester, as visualized by sonography. The didactic study topics will include the evaluation of abnormalities, fetal growth assessment, high risk obstetrics and post-partum complications. This course is integrated with DMS 233L, 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 fetal growth and development. Color and spectral Doppler applications will also be applied to the appropriate anatomy.

Pre-requisites: DMS 232, DMS 232L

**Corequisites**: DMS 233L

# **Course Objectives**

The goal of this course is to introduce the sonography student to the ultrasound imaging techniques used in gynecology and obstetrical scanning, for identifying normal and abnormal fetal development, assessment of fetal growth in the normal second and third trimester, genetic abnormalities of fetal structures, post-partum complications and high-risk obstetrics. Objectives:

- 1. Identify the sonographic appearance of normal fetal structural anatomy.
- 2. Describe the transabdominal scanning techniques and protocols used in obstetrical scanning.
- 3. Define the pathologies discussed in this course and describe their sonographic appearance.
- 4. Describe the normal development of the fetus and its sonographic appearance at different gestational ages.
- 5. Describe viable and nonviable fetus with appropriate terminology.
- 6. Define post-partum complications discussed in this course and describe the related sonographic appearance
- 7. Define and describe high-risk pregnancy and the maternal and fetal factors for a pregnancy considered high risk

**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

<u>Textbook(s):</u> 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 Course Outline:**

Date	Topic/Scanning	Assignment/Quiz/Test
9/23	Placenta	Read Ch 56 Hagen-Ansert
		Complete Ch 56 Workbook Exer 1-?
9/30	Umbilical Cord	Read Ch 57 Hagen-Ansert
		Complete Ch 57 Workbook Exer 1-?
10/7	Fetal Circulation	<b>Quiz #1</b> Ch 56-57
10/14	Amniotic Fluid & Measurements	Read Ch 58 Hagen-Ansert
		Complete Ch 58 Workbook Exer 1-?
		Assignment #1
10/21	Cont	
10/28	Fetal Face and Neck	Read Ch 59 Hagen-Ansert
		Complete Ch 59 Workbook Exer 1-?
11/4	Fetal Neural Axis	<b>Quiz #2</b> Ch 58-59
		Read Ch 60 Hagen-Ansert
		Complete Ch 60 Workbook Exer 1-?

11/11	Fetal Thorax	Read Ch 61 Hagen-Ansert
		Complete Ch 61 Workbook Exer 1-?
		Assignment #2
11/18	Fetal Anterior Abdominal Wall	Read Ch 62 Hagen-Ansert
		Complete Ch Workbook Exer 1-?
11/25	Fetal Abdomen	<b>Quiz #3</b> Ch 60-62
		Read Ch 63 Hagen-Ansert
		Complete Ch 63 Workbook Exer 1-?
		Assignment #3
12/2	Fetal Urogenital System	Read Ch 64 Hagen-Ansert
		Complete Ch 64 Workbook Exer 1-?
12/9	Fetal Skeleton	Ch 65
		Read Ch 65 Hagen-Ansert
		Complete Ch Workbook Exer 1-?
		<b>Quiz #4</b> Ch 63-65
12/11	Review	Ch 56-65
12/16	Final Test	Final Test

# 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 Theme:**

This course addresses a DMS Program theme by developing the knowledge and psychomotor scanning skill sets necessary to perform gynecologic and obstetrical sonography, 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:**

Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email 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 campus email 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 or Special Needs:**

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor 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. 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.

# 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.