

Course Prefix/Number/Title: DMS-201 – Ultrasound Foundation Concepts

Number of Credits: 3 semester credits

Course Description:

This course is designed to provide the student with basic introductory knowledge of diagnostic medical sonography. Physical principles, instrumentation, equipment operation and patient procedural preparation concepts are presented as an introduction into ultrasound including medical applications. Students will also be introduced to medical and sonographic terminology, OSHA safety regulations, infection control, disease transmission, ergonomic optimization to reduce Work Related Musculoskeletal Disorders (WRMSDs) and CDC's Standard Precaution guidelines. This course is completed during the first month of the DMS program in preparation of clinical experiences.

Pre-requisites: General Post-Secondary Courses

Instructor: Amy Hofmann

Office: Suite 302 5th Ave Building, 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: 9:00 – 3:00 pm M-F, August 23rd to Sept 17th in Suite 301

Lab Schedule: NA

Textbook: Diagnostic Sonography, Hagen-Ansert, 8th Edition; Workbook Diagnostic Sonography, Hagen-Ansert, 8th Edition

Lab Manual: NA

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:

<u>DATE</u>	<u>TOPIC</u>	<u>READING</u>
<u>Week 1</u>		
8-23	Review of DMS Handbook; HR onboarding	Trinity DMS Handbook
8-24	Trinity Health Policy and Procedure Overview	
8-25	Foundations, terminology, role of sonographer	Chpt 1,
8-26	Imaging equipment, sonographic foundations	Chpt 6
8-27	Mandatory education modules, Trinity Health	
<u>Week 2</u>		
8-30 to 8-31	Work related injury, essentials of patient care	Chpt 3
	CPR training, general patient care continued	Chpt 2
9-1 to 9-3	Introduction to superficial tissue, abdomen imaging	
	AIC Thyroid/Aorta Scanning lab	
<u>Week 3</u>		
9-7 to 9-10	Introduction to obstetric imaging	
	AIC Aorta/OB Scanning lab	
<u>Week 4</u>		
9-13 to 9-15	Introduction to EMR, PACS; Scanning Lab 5 – 7 pm	
9-16 to 9-17	EMR, PACS system review, AIC and MAC tours	

Course Goal and Objectives

Goal:

The goal of this course is to familiarize the student with policies, procedures and terminology applicable to the program, the radiology department and Trinity Health. The student will learn what is expected of them while enrolled in the DMS program, be oriented to the hospital campus, review pertinent program and Trinity Health policies and the Clinical Plan. Description of the roles, responsibilities and the rules of the Diagnostic Medical Sonographer will be introduced, also the indication and applications of the diagnostic procedures, safety, protection and imaging processing will be covered. Students will learn through observation, scanning and application of knowledge obtained during didactic coursework and scanning labs. Student will be directly supervised.

Objectives:

1. Understand the locations of and general daily operation of the DMS program and sonography, and radiology department at Trinity Health.
2. Become familiar with pertinent Trinity Health and DMS program policies
3. Develop a basic knowledge of OSHA safety requirements and Center for Disease Control (CDC) Standard Precautions.
4. Develop an understanding of proper patient care, treatment and confidentiality.
5. Achieve Basic CPR Certification
6. Develop a basic understanding of sonographic imaging principles and operation of sonographic imaging equipment used in the department.
7. Establish EMR, PACS and clinical time/activity record systems (Trajecsys) accounts.

General Education (GE) Goal and Objectives

Not applicable

Relationship to Campus Theme:

This course addresses a DMS Program theme by introducing students to foundational sonography concepts to include overview of diagnostic sonography procedures and other primary technologies 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

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.

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 and DCB Student Handbook..

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) or Student Success Center (701-228-5668) as early as possible during the beginning of the semester.

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.