

# BHS in Clinical and Diagnostic Sciences with Emphasis in Diagnostic Medical Ultrasound

## **Degree Program Description**

Sonographers (Ultrasound technologists) use high-frequency sound waves to produce dynamic visual images of organs, tissues, or blood flow in two, three, and four dimensions. Sonographers work in hospitals, clinics, private physician offices and other medical facilities performing examinations in their areas of specialization. Areas of specialization include: Abdomen, Obstetrics/Gynecology, Echocardiography, and Vascular technology. Sonographers function with a high degree of independence, using skill, judgment and knowledge to gather data required to reach a diagnosis. The DMU program includes two years of pre-requisite coursework and two years of professional coursework. Students graduate with a Bachelor of Health Science (BHS) degree in Clinical and Diagnostic Sciences with an emphasis in Diagnostic Medical Ultrasound from the University of Missouri. Graduates of the program are eligible to challenge the credentialing examination administered by the American Registry for Diagnostic Medical Sonography (ARDMS). The program is accredited by the Commission on Accreditation of Allied Health Education.

## **Major Program Requirements**

Students must complete Program Prerequisite courses below with a grade of C- or higher to be eligible to apply to the BHS in Clinical and Diagnostic Sciences with an emphasis in Diagnostic Medical Ultrasound major. Major Core Requirements must be completed with a grade of C (2.0) or higher within the program, unless otherwise noted. Students must also meet degree and University requirements (http://catalog.missouri.edu/academicdegreerequirements/ universityrequirements/), including University general education (http://catalog.missouri.edu/academicdegreerequirements/ generaleducationrequirements/) requirements. In addition to the degree requirements below, the Diagnostic Medical Ultrasound program requires an application, including an interview, and students are encouraged to work with an advisor in order to best structure the prerequisites and prepare for the program application.

Program Prerequisites		34
ENGLSH 1000	Writing and Rhetoric	3
or ENGLSH 1000H	Honors Writing and Rhetoric	
MATH 1100	College Algebra	3
CHEM 1320	College Chemistry I	4
or CHEM 1320H	College Chemistry I - Honors	
or CHEM 1100	Atoms and Molecules with Lab	
PHYSCS 1210	College Physics I	4
CDS 2190	Medical Terminology	3
PHIL 2440	Medical Ethics	3
or HLTH_SCI 4480	Clinical Ethics	
or HLTH_SCI 4480W	Clinical Ethics - Writing Intensive	
or CDS 4480	Clinical Ethics	

PTH_AS 2201 & PTH_AS 2203	Human Anatomy Lecture and Human Anatomy Laboratory	5
MPP 3202	Elements of Physiology	5
STAT 1200	Introductory Statistical Reasoning	3
or STAT 1300	Elementary Statistics	
or ESC_PS 4170	Introduction to Applied Statistics	
DMU 1000	Introduction to Diagnostic Medical Ultrasound	1
Major Core Requirements		78
DMU 3309	Normal Ultrasound Clinical	5
DMU 3212	Sectional Anatomy	3
DMU 3313	Sonography Principles and Instrumentation I	3
DMU 3315	Sonography Principles and Instrumentation II	3
DMU 3322	Superficial Organs Ultrasound	3
DMU 4001	Topics in Diagnostic Medical Ultrasound	3
DMU 4085W	Problems in Diagnostic Medical Ultrasound - Writing Intensive	3
DMU 4234	Clinical Pathophysiology	3
DMU 4314	Abdominal Ultrasound	5
DMU 4318	Gynecology Ultrasound	3
DMU 4320	Obstetrics Ultrasound	3
DMU 4326	Sonography Principles and Instrumentation III	3
DMU 4332	Vascular Ultrasound	4
DMU 4342	Adult Cardiac Ultrasound	6
DMU 4941	Ultrasound Clinical I	7
DMU 4944	Vascular Ultrasound Clinical IV *	7
DMU 4945	Cardiac Ultrasound Clinical V $^{*}$	6
DMU 4993	Ultrasound Clinical II	8
*D		

\*Denotes courses in which a grade of B (3.0) or higher is required.

### **Professional Certification**

Upon successfully completing the requirements of the program, graduates are eligible to apply to the American Registry of Diagnostic Medical Sonographers (ARDMS) for certification in Abdomen, Cardiac, Obstetrics and Gynecology and Vascular Technology.

### Semester Plan

Below is a sample plan of study, semester by semester. A student's actual plan may vary based on course choices where options are available.

First Year					
Fall	CR	Spring	CR		
MATH 1100	3	BENGLSH 1000	3	3	
HIST 1100, 1200, or POL_SC 1100	3	PHYSCS 1210	2	1	
CHEM 1100	4	Humanities/Fine Arts	3	3	
Social/Behavioral	3	3 STAT 1200, 1300, or	. 3	3	
Science		ESC_PS 4170			
	13	3	13	3	
Second Year					
Fall	CR	Spring	CR	Summer	CR
PHIL 2440	3	8 MPP 3202	5	5 DMU 3212	3
PTH_AS 2201 & PTH_AS 2203	5	5 CDS 2190	3	3 DMU 3313	3



University of Missouri

Humanities/Fine Arts		00+ level writing ensive course	g 3	3	
DMU 1000		cial/Behavioral ence	3	3	
	12		14	1	6
Third Year					
Fall	CR Sp	ring	CR	Summer	CR
DMU 3309	5 DN	IU 4314	Ę	5 DMU 4941	7
DMU 3315	3 DN	IU 4318	3	3 DMU 4085W	3
DMU 3322	3 DN	IU 4320	3	3	
DMU 4234	3 DN	IU 4326	3	3	
	14		14	1	10
Fourth Year					
Fall	CR Sp	ring	CR	Summer	CR
DMU 4332	4 DN	IU 4001	3	3 DMU 4945	6
DMU 4993	8 DN	IU 4342	Ę	5	
	DN	IU 4944	7	7	
	12		15	5	6

Total Credits: 129

\*\* DMU 1000 Introduction to Diagnostic Medical Ultrasound is required for application to the DMU Program. Prospective students may enroll in the fall semester or the spring semester.