

# Bachelor of Science in Health Professions: Diagnostic Medical Sonography Program (BS)

## Degree Type

Bachelor of Science

## Requirements for Graduation

This program prepares the graduate to utilize ultrasound to collaborate with medical professionals in the diagnosis and treatment of clients referred for ultrasound studies. Theory content and clinical experience focuses on ultrasound imaging including the abdominal organs and structures, obstetrics and gynecology, superficial structures (e.g., thyroid, breast, vessels, prostate and testicles) and neonatal brain and spine. These images aid physicians in diagnosing and treating certain pathologies. The diagnostic medical sonographer must have a very in-depth working knowledge of human anatomy. Clinical experience is a major emphasis of the program. Graduates of the program meet published requirements by the American Registry of Diagnostic Medical Sonographers (ARDMS) to apply for the registry examination in Abdomen and Obstetrics/Gynecology.

The program is designed to be completed in seven semesters and three 13 week summer sessions.

## Program Goals

To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the following concentration(s) it offers: Abdominal Sonography-Extended, Obstetrics and Gynecology sonography.

## Program Outcomes

Upon completion of the diagnostic medical sonography program the student will be prepared to:

1. Competently perform as an entry-level sonographer in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains for the abdominal sonography-extended, and obstetrics and gynecology sonography concentrations..
2. Demonstrate ethical and professional behavior through sonographic practice congruent with standards of practice.
3. Meet the eligibility requirements to apply for the American Registry of Diagnostic Medical Sonographers (ARDMS) exams.
4. Interact effectively with individuals in a manner that reflects caring and acknowledges the holistic nature of individuals.
5. Promote growth of the health professional and awareness of health professions through education of individuals, groups and communities of interest.
6. Correlate current research to ensure best-practice delivery of specialty specific, quality patient care and services.

## Program Requirements:

Each student must complete 50 semester hours of general education courses and fifty-four (54) credit hours in the diagnostic medical sonography major. The program also includes the option of a Vascular Minor. Official transcript(s) must be on file for all transfer credits.

### General Education Courses

*Students who have transferred in 36 or more credit hours will take GSTU101X.*

Item #	Title	Credits
GSTU101	Introduction to the Bryan College of Health Sciences Experience	1
HIMS100	Medical Terminology	1
NURA102X	Basic Nursing Assistant (non-credit)	

### Natural Sciences

#### Natural Sciences

*Must complete all course listed.*

Item #	Title	Credits
BIOS203	Anatomy & Physiology I	4
BIOS204	Anatomy & Physiology II	4
BIOS221	Pathophysiology	3
BIOS318	Cross-Sectional Anatomy	3
PHYS105	Descriptive Physics (with lab)	4

### Social Sciences

#### Social Sciences

*Must complete 6 cr hrs from electives (GERO, INTL, PBHL, PSYC, SOCI).*

Item #	Title	Credits
	Social Science Elective (6)	6

### Communications

#### Communications

*Must complete 3 cr hrs from COMM courses.*

Item #	Title	Credits
	Communications Elective	3

# Humanities

## Humanities

*Must complete 3 cr hrs from elective pool (ENGL, HIST, HUMS, INTL, PHIL, RELI, SIGN, SPAN)*

Item #	Title	Credits
ENGL104	English Composition I	3
PHIL210	Ethics in Health Care	3
	Humanities Elective	3

# Mathematics

## Mathematics

*Must complete all courses listed.*

Item #	Title	Credits
MATH155	College Algebra	3
STAT210	Elements of Statistics	3

# Business/Management

## Business/Management

*Must complete 3 cr hrs from ECON or MGMT courses.*

Item #	Title	Credits
	Business Management Elective	3

# Cultural Studies

## Cultural Studies

*Must complete 3 cr hrs from elective*

*pool. ([GERO303](#), [INTL202-2](#), [INTL202-3](#), [INTL205-2](#), [INTL205-3](#), [PBHL305](#), [RELI215](#), [RELI316](#), [SIGN111](#), [SOCL222](#), [SOCL320](#), [SOCL324](#), [SPAN](#))*

Item #	Title	Credits
	General Elective with Cultural Studies (CS) designation	3

# Major - Diagnostic Medical Sonography

## Major - Diagnostic Medical Sonography

Item #	Title	Credits
AHAL223	Physics and Instrumentation	4
AHAL313	Research in Healthcare	2
AHAL314	Issues and Trends in Health Professions	2
DMSO312	Abdominal Sonography II	1
DMSO315	Obstetrical Sonography	4
DMSO318	Pediatric Sonography	2
DMSO320	Sonography of Superficial Structures	2
DMSO332	Gynecologic Sonography	2
DMSO333	Abdominal Sonography I	4
DMSO337	Diagnostic Medical Sonography Skills Lab	2
DMSO338	Diagnostic Medical Sonography Skills Lab II	1
DMSO339	Diagnostic Medical Sonography Clinical Experience	6
DMSO428	Diagnostic Medical Sonography: Clinical Practicum I	8.5
DMSO429	Diagnostic Medical Sonography: Capstone I	0.5
DMSO431	Board Review: Diagnostic Medical Sonography	2
DMSO434	Diagnostic Medical Sonography: Clinical Practicum II	10.5
DMSO435	Diagnostic Medical Sonography: Capstone II	0.5

## Minor-Vascular Sonography

### Minor-Vascular Sonography

Item #	Title	Credits
CVTD226	Cardiovascular Physiology	4
VASC315	Vascular Sonography Skills I	1
VASC316	Vascular Sonography Skills II	1
VASC320	Vascular Sonography II: Pathology and Procedures	3
VASC341	Core I: Vascular Sonography	7

## Sample Curriculum Plan

### Sample Curriculum Plan

*Sample curriculum plan for traditional first year student with no transfer credit.*

#### Course Sequencing

### Year 1

#### Year 1

## Fall

Fall

Item #	Title	Credits
BIOS203	Anatomy & Physiology I	4
ENGL104	English Composition I	3
GSTU101	Introduction to the Bryan College of Health Sciences Experience	1
HIMS100	Medical Terminology	1
MATH155	College Algebra	3
	Social Science Elective	3

## Spring

Spring

Item #	Title	Credits
BIOS204	Anatomy & Physiology II	4
NURA102X	Basic Nursing Assistant (non-credit)	
PHYS105	Descriptive Physics (with lab)	4
	Communications Elective	3
	Humanities Elective	3

## Summer

Summer

Item #	Title	Credits
AHAL223	Physics and Instrumentation	4
CVTD226	Cardiovascular Physiology	4

## Year 2

Year 2

## Fall

Fall

Item #	Title	Credits
BIOS221	Pathophysiology	3
VASC315	Vascular Sonography Skills I	1
VASC341	Core I: Vascular Sonography	7
	Social Science Elective	3

## Spring

Spring

AHAL 314, VASC 316, VASC 320,

Item #	Title	Credits
AHAL314	Issues and Trends in Health Professions	2
BIOS318	Cross-Sectional Anatomy	3
STAT210	Elements of Statistics	3
VASC316	Vascular Sonography Skills II	1
VASC320	Vascular Sonography II: Pathology and Procedures	3
	Cultural Studies Elective	3

## Summer

Summer

Item #	Title	Credits
	Business Management Elective	3
PHIL210	Ethics in Health Care	3

## Year 3

Year 3

## Fall

Fall

Item #	Title	Credits
AHAL313	Research in Healthcare	2
DMSO320	Sonography of Superficial Structures	2
DMSO332	Gynecologic Sonography	2
DMSO333	Abdominal Sonography I	4
DMSO337	Diagnostic Medical Sonography Skills Lab	2

## Spring

Spring

Item #	Title	Credits
DMSO312	Abdominal Sonography II	1
DMSO315	Obstetrical Sonography	4
DMSO318	Pediatric Sonography	2
DMSO338	Diagnostic Medical Sonography Skills Lab II	1
DMSO339	Diagnostic Medical Sonography Clinical Experience	6

## Summer

Summer

Item #	Title	Credits
DMSO428	Diagnostic Medical Sonography: Clinical Practicum I	8.5
DMSO429	Diagnostic Medical Sonography: Capstone I	0.5

## Year 4

Year 4

## Fall

Fall

Item #	Title	Credits
DMSO431	Board Review: Diagnostic Medical Sonography	2
DMSO434	Diagnostic Medical Sonography: Clinical Practicum II	10.5
DMSO435	Diagnostic Medical Sonography: Capstone II	0.5
<b>Total Credits</b>		<b>120</b>