

## DIAGNOSTIC MEDICAL SONOGRAPHY, Associate in Applied Science Degree - 3426

Health Careers Department

CIP Code: 51.0910

The Diagnostic Medical Sonography AAS program prepares students as entry-level Diagnostic Medical Sonographers in the Abdominal Sonography-Extended and Obstetrics and Gynecology Sonography areas of study. Students are educationally prepared and clinically competent as a prerequisite to enter professional practice. Graduates of this program are able to provide patient care services using ultrasound and related diagnostic procedures. This program is offered in cooperation with affiliated hospitals and medical imaging centers; the College provides classroom and lab instruction, while the hospitals and imaging centers provide the clinical instruction. The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), 9355-113th St. N, #7709, Seminole, FL 33775, (727) 210-2350, [www.caahep.org](http://www.caahep.org), upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS), 6021 University Boulevard, Suite #500, Ellicott City, MD 21043, (443) 973-3251, [www.jrcdms.org](http://www.jrcdms.org). This program may be completed at the Harrisburg Campus through on-campus/in-person instruction.

**Selective Program:** Entry into this program is not guaranteed with admission to the College; this is a selective and competitive admission program; specific admissions criteria must be met. **Students must be aware that even though the program begins in the Fall semester, coursework can be completed during the preceding Summer semester.** Please go to the Health Careers website ([www.hacc.edu/healthcareers](http://www.hacc.edu/healthcareers)), or email at [start@hacc.edu](mailto:start@hacc.edu) for specific program entry requirements

Please note that students interested in this program must begin in the Pre-Health Professions AS degree. Then, students may apply for admission into this program, once they meet the requirements to apply. Students can discuss these admission requirements as part of their advising process.

The following requirements must be completed (at the student's expense) after being selected for, but prior to starting the clinical portion of the program and after the first year in the program. Requirements include physical examination and immunizations, background checks, drug and alcohol screens and CPR certification. The student should consider these factors before enrolling. If the student has any questions regarding this, he or she should contact the program director.

### *Career Opportunities*

Graduates find employment as sonographers in hospital ultrasound departments and independent medical imaging centers.

### *Competency Profile*

This curriculum is designed to prepare students to:

- Perform as competent entry level diagnostic medical sonographers in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains for the Abdominal Sonography-Extended and Obstetrics and Gynecology Sonography learning concentrations
- Utilize oral and written communication
- Demonstrate knowledge and application of ergonomic techniques, infection control, and patient care
- Demonstrate knowledge of the roles and responsibilities of health care professions to effectively communicate and collaborate with a diverse population in the health care environment
- Demonstrate knowledge and understanding of anatomy, relational anatomy, anatomic variants, sonographic appearance, physiology, pathology and pathophysiology of the abdomen, superficial structures, gravid and nongravid pelvis
- Demonstrate knowledge and application of image production, optimization and biological effects.
- Perform sonographic examinations of the abdomen, superficial structures, gravid and non-gravid pelvis with both transabdominal and endocavity transducers and Doppler/M mode display modes according to practice parameters established by national professional organizations and the protocols of the clinical affiliates
- Recognize, identify and document the sonographic appearance of normal and abnormal structures and processes of the abdomen, superficial structures, gravid and nongravid pelvis

**PROGRAM REQUIREMENTS (TOTAL CREDITS = 76)**

<b>General Education</b>		<b>Major Requirements</b>		<b>Other Required Courses</b>	
ENGL 101 English Composition I	3	DMS 105 Introduction to Health Care	4	BIOL 121 Anatomy & Physiology I	4
COMM 101 Effective Speaking (or)	3	DMS 110 Introduction to DMS	4	BIOL 122 Anatomy & Physiology II	4
COMM 203 Interpersonal Communication	(3)	DMS 115 Clinical Experience I	2	PHYS 161 Physics for Imaging	<u>3</u>
Humanities & Arts Core Elective	3	DMS 120 DMS Lab I	1		<b>11</b>
Math or Science Core Elective - <i>MATH 103</i>	3	DMS 125 Clinical Experience II	3		
Social & Behavioral Science Core Elective – <i>PSYC 101</i>	3	DMS 130 Abdominal Sonography	4		
First-Year Seminar Elective – <i>AH 140</i>	3	DMS 140 DMS Lab II	1		
Wellness Elective	<u>1</u>	DMS 150 OB/GYN Sonography I	3		
	<b>19</b>	DMS 170 Acoustical Principles I	4		
		DMS 180 High Resolution Sonography	1		
		DMS 210 Vascular Sonography	1		
		DMS 215 Clinical Experience III	4		
		DMS 220 DMS Lab III	1		
		DMS 225 Clinical Experience IV	4		
		DMS 240 DMS Lab IV	1		
		DMS 250 OB/GYN Sonography II	3		
		DMS 270 Acoustical Principles II	2		
		DMS 274 DMS Topics	<u>3</u>		
			<b>46</b>		

*Note:* Students must complete the following courses with a minimum grade of C to graduate: all BIOL; DMS; MATH; and PHYS courses; ENGL 101 and COMM 101 or 203.

**RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS**

Part time students can complete this program by taking one or more courses each semester.

<b>Fall Semester I</b>		<b>Spring Semester I</b>		<b>Fall Semester II</b>		<b>Spring Semester II</b>		<b>Summer</b>	
BIOL 121	4	BIOL 122	4	DMS 105	2	DMS 115	2	DMS 125	3
ENGL 101	3	COMM 101 or 203	3	DMS 110	4	DMS 120	1	DMS 140	1
MATH 103	3	Humanities/Arts Core Elective	3	PHYS 161	3	DMS 130	4	DMS 180	1
AH 140	3	PSYC 101	3	Wellness Elective	1	DMS 150	3	DMS 210	1
						DMS 170	4		
<b>Fall Semester III</b>		<b>Spring Semester III</b>							
DMS 215	4	DMS 225	4						
DMS 220	1	DMS 240	1						
DMS 250	3	DMS 274	3						
DMS 270	2								