

## **SCHOOL OF DIAGNOSTIC MEDICAL SONOGRAPHY**

The Diagnostic Medical Sonographer incorporates high frequency sound waves and other diagnostic techniques to help obtain a medical diagnosis. The professional level of this health care service provider requires a highly skilled and competent individual who can function as an integral part of the health care team.

The Diagnostic Medical Sonographer provides patient care services utilizing medical applications of Ultrasound. This is done under the supervision of a physician who is responsible for the use and interpretation of ultrasonic procedures.

The Diagnostic Medical Sonographer is able to obtain, review, and integrate pertinent patient history and clinical data to facilitate accurate diagnostic outcomes. The Diagnostic Medical Sonographer must be able to perform a wide variety of procedures while accurately and efficiently recording and processing all necessary data.

The Diagnostic Medical Sonographer must acquire and maintain specialized technological skills and medical knowledge in order to successfully render quality patient care.

The Diagnostic Medical Sonographer requires:

- Good interpersonal skills for working with patients, families and other health care professionals
- A knowledge of pathology and physiology
- Technical expertise with Ultrasound instruments and computers
- A knowledge of quality control programs; how to work with ultrasound safely; how to minimize patient exposure
- Good analytic and problem-solving skills
- Compassion, professionalism, and a high degree of personal integrity

Career opportunities range from working in a hospital or medical center, in a physician's office, or a free standing clinic. The opportunities for career advancement are varied and many experienced technologists move on to careers in administration, research and with equipment manufacturers educating users on their products.

## **AMPLIFIED PROGRAM**

The Muhlenberg Snyder School of Diagnostic Medical Sonography offers an amplified program with Union County College (UCC) that leads to a diploma in Diagnostic Medical Sonography from Muhlenberg and an Associate in Science (AS) degree from the college.

This cooperative program offers the advantages of a hospital-based Diagnostic Medical Sonography program, as well as college-based academic courses. The college credits granted for the Diagnostic Medical Sonography courses enable graduates to transfer credits towards a baccalaureate degree if desired. Counseling regarding transfer credits is available at the School.

The General Education courses for the program can be completed at Union County College, or transferred in from an accredited college (maximum of 22 credits). College education from outside the United States may be considered after official evaluation (example: [www.wes.org](http://www.wes.org)).

The Muhlenberg Snyder School grants a diploma in Sonography and Union County College grants an Associate in Science degree for those who fulfill all program requirements. The graduate can apply most courses toward a baccalaureate degree with Thomas Edison State College or any institution of their liking.

## **GENERAL ADMISSIONS POLICY AND REQUIREMENTS**

### **Eligibility**

The Muhlenberg Harold B. and Dorothy A. Snyder Schools are not approved by the INS to accept students who are in the United States on a visa of any kind, nor can the Schools accept illegal aliens into any program. An applicant must be a United States citizen or a permanent resident alien (possession of a green card).

All applicants to the Diagnostic Medical Sonography program must demonstrate/complete the following:

Candidates must file a completed admissions application form, all high school and college (if applicable) transcripts, GED certificate with scores, three(3) letters of recommendation, signed Consumer Information Form and a minimum 250 word essay, as described on the back of the application form.

### **Application process**

Admission into the program is competitive. The admissions committee will consider all High School grades, particularly grades in the sciences, and any allied health related courses. High School Biology and two math classes must be completed with a "C" or better. Graduates from High School within the last 3

years must also submit SAT scores. The admissions committee will also evaluate references, communication skills, and the ability to follow directions during the application process. Life experience is also considered: for example, employment or volunteer work in the health care setting or situations that require public relation skills or good customer service. All transcripts, transcript evaluations, reference letters and essays must be submitted prior to evaluation of the application. See the application for further instructions. A checklist is provided for your convenience.

### **Health Occupations Basic Entrance Test (HOBET)**

Prior to acceptance into the program, all candidates for SOMITS (Schools of Medical Imaging and Therapeutic Sciences) will sit for the HOBET exam.

The Muhlenberg Snyder School of Diagnostic Medical Sonography selects students for the program based on the results of the criteria evaluation and the recommendations from employers, educators, and/or volunteer supervisors. The criteria evaluation is an assessment of academic performance and written communication skills. Accepted students must submit a non-refundable acceptance fee.

General Education courses may be taken through Union County College or transferred from an accredited college.

Education from outside the United States will be considered on a case by case basis after evaluation of the foreign transcripts by an accepted evaluation method.

Regardless of educational background, no applicant is exempt for the admission requirements.

Graduates of a 2 year hospital based allied health program must request evaluation of their courses by the Program Director of the Diagnostic Medical Sonography Program to determine if they are equivalent to various General Educational courses. Course descriptions, syllabi, and/or course outlines may be required for this evaluation.

All sciences must have been completed within 5 years of the May start date. If courses were completed prior to that time the student may demonstrate current knowledge by passing a challenge exam. CLEP (College Level Examination Program) or TESC (Thomas Edison State College) exams can be taken for courses not taken and must be arranged with the specific department chairperson at the college.

### **FOREIGN EDUCATION**

Applicants with high school or college education from outside the United States must have their transcripts evaluated by a professional evaluation agency. (See

the application checklist for agencies acceptable to this School). A course by course evaluation is required for all transcripts.

English language courses or the TOEFL (Test of English as a Foreign Language) exam do not fulfill the English Composition general education requirement.

### **APPLICATION DEADLINES**

The application deadline is May 15 each year. All application materials must be received by this date. NO EXTENSIONS WILL BE GRANTED.

### **COST**

See the current tuition and fees list for program costs. Students are billed on a semester basis.

### **FINANCIAL AID**

The Muhlenberg Snyder Schools are approved for Title IV financial aid and Veteran's assistance programs. All inquiries for eligibility should be directed to the Financial Aid Office in the school building.

### **ACCREDITATIONS/RECOMMENDATIONS**

Commission on Accreditation of  
Allied Health Education Programs

CAAHEP  
1361 Park Street  
Clearwater, FL 33756  
Phone: 727-210-2350  
Fax: 727-210-2354

JRC-DMS  
Joint Review Committee on Education in  
Diagnostic Medical Sonography.  
6021 University Boulevard, Suite 500  
Ellicott City, MS 21043  
(443) 973-3251  
[www.jrcdms.org](http://www.jrcdms.org)

## CURRICULUM

### Program configuration/General Education phase

Students must complete the general educational requirements for the Associate in Science Degree and CAAHEP accreditation requirements before they can graduate. The following courses comprise the General Educational requirement:

RNT 101: Medical Terminology  
BIO 105: Anatomy and Physiology Part I  
BIO 106: Anatomy and Physiology Part II  
ENG 101: English Composition I  
ENG 102: English Composition II  
MAT 119: College Algebra (or higher)  
MAT 127: Elementary Statistics  
PSY 101 or SOC 101: General Psychology or Sociology  
IDH 101: Fundamentals of Health and Disease  
PHY 101 or PHY 125: Physics  
HUM: Humanities Elective  
CIS 100 or CIS 101: Introduction to Computer Applications or Introduction to Information Systems

#### **NOTE:**

**The following General Education courses must be completed before the student can enter into the Professional phase: RNT 101, BIO 105, ENG 101, MAT 119, PHY 101 or PHY 125.**

**In addition, DMS 101-081 must be completed prior to the first Professional Phase semester**

### Program configuration/ Professional phase

Students attend classes at the Muhlenberg Snyder Schools and clinical practicum concurrently throughout the program. This allows the student to practice what they are learning in the classroom and affords a better understanding of the materials being taught.

RNT 102: Healthcare Today  
DMS 100: Introduction to Sonography  
DMS 101-081: Patient Care  
DMS 102: Cross-Sectional Anatomy  
DMS 103: Ultrasound Physics and Instrumentation Part I  
DMS 104: Ultrasound Physics and Instrumentation Part II  
DMS 105: Ultrasound of the Abdomen I  
DMS 106: Ultrasound of the Abdomen II  
DMS 107: Ultrasound of the female pelvis  
DMS 109: Obstetrical Sonography I  
DMS 111: Superficial Structures I  
DMS 116: Registry Review  
DMS 117: Obstetrical Sonography II  
DMS 118: Superficial Structures II  
CLPS 901: Clinical Sonography I  
CLPS 902: Clinical Sonography II  
CLPS 903: Clinical Sonography III  
CLPS 904: Clinical Sonography IV  
CLPS 905: Clinical Sonography V

The Professional phase of the program is five semesters in length. Clinical rotations 1 and 4 are 12 weeks in length, and clinical rotations 2, 3 and 5 are 15 weeks in length. The change in clinical sites allows for the student to become proficient while getting exposure to a wide variety of protocols and different types of equipment.

### **GRADUATION, REGISTRATION**

Upon successful completion of the program the student will be awarded the following:

- A certificate in Diagnostic Medical Sonography from the Muhlenberg Snyder Schools. This allows the graduate to sit for the American Registry of Diagnostic Medical Sonographers (ARDMS) national boards and/or the American Registry of Radiologic Technologists (ARRT) exam.
- An Associate in Science Degree from Union County College.

### **BACHELOR OF SCIENCE**

Courses taken at UCC and the Muhlenberg programs are recognized by Thomas Edison State College (TESC) as fulfilling requirements for a BS degree. Counseling regarding this matter is available at the school.

The additional courses required to complete the BS degree must be taken at an accredited 4-year college or through TESC guided courses, distance learning or competency exams. No more than 80 credit hours including the General Education courses and the Diagnostic Medical Sonography courses can be transferred from a 2-year college.

For more information contact the TESC office of admissions at 609-292-6564 or [Admissions@call.TESC.edu](mailto:Admissions@call.TESC.edu) TESC also has a web page at [www.TESC.edu](http://www.TESC.edu)

**BY VIRTUE OF AN AGREEMENT BETWEEN  
UNION COUNTY COLLEGE AND  
MUHLENBERG HAROLD B. AND DOROTHY A. SNYDER SCHOOLS  
DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM  
ASSOCIATE IN SCIENCE DEGREE**

First semester: **General Education Requirements**

Fall Semester, September – December

Course #	Course	Lec.	Lab	Cr.
RNT 101	Medical Terminology (on-line)	1		1
BIO 105	Anatomy & Physiology Part I	3	3	4
ENG 101	English Composition I	3		3
MAT 119	Algebra (or higher)	4		4
PSY 101	General Psychology	3		3
	or			
SOC 101	Sociology	3		3

15

Second semester: **General Education Requirements**

Spring Semester, January – May

Course #	Course	Lec.	Lab	Cr.
IDH 101	Fundamentals of Health and Disease	3		3
BIO 106	Anatomy & Physiology Part II	3	3	4
	Humanities Elective	3		3
DMS 101	Patient Care	2		2
PHY 101	Physics	3	3	4
	or			
PHY 125	Elements of Physics	3	3	4

16

Third Semester: **Professional Courses**

Summer Sessions I & II, May – August

Course #	Course	Lec.	Lab	Cr.
DMS 100	Introduction Sonography	2	1	2
DMS 102	Cross-sectional Anatomy	2		2
DMS 103	Ultrasound Physics and Instrumentation I	3		3
DMS 105	Ultrasound of the Abdomen I	3		3
CLPS 901	Clinical Sonography I	0		0

10

Fourth Semester: **Professional Courses**

Fall Semester, September – December

Course #	Course	Lec.	Lab	Cr.
DMS 104	Ultrasound Physics and Instrumentation II	3		3
DMS 106	Ultrasound of the Abdomen II	3		3
DMS 107	Ultrasound of the Female Pelvis	3		3
RNT 102	HealthCare today (on-line)	2		2
CLPS 902	Clinical Sonography II	0		0
				11

**Fifth Semester: Professional Courses**

Spring Semester, January – May

Course #	Course	Lec.	Lab	Cr.
DMS 109	Obstetrical Sonography I	3		3
DMS 111	Ultrasound of Superficial Structures I	3		3
CIS 100	Introduction to Computer Applications	2	2	3
	Or			
CIS 101	Introduction to Information Systems	2	2	3
CLPS 903	Clinical Sonography III	0		0
				9

**Sixth Semester: Professional Courses**

Summer Sessions I & II, May – August

Course #	Course	Lec.	Lab	Cr.
ENG 102	English Composition II (on-line)	3		3
DMS 117	Obstetrical Sonography II	3		3
DMS 118	Ultrasound of Superficial Structures II	3		3
CLPS 904	Clinical Sonography IV	0		0
				9

**Seventh Semester: Professional Courses**

Fall Semester, September – December

Course #	Course	Lec.	Lab	Cr.
DMS 116	Registry Review	3		3
CLPS 905	Clinical Sonography V	0		0
MAT 127	Elementary Statistics	4		4
				7

Total Credits for the program **77**