

Vascular
Sonography

Echocardiography



GENERAL
ULTRASOUND

Diagnostic Medical Sonography

Diagnostic Medical Sonography

Program Packet



Dear Prospective Applicant:

This packet provides you a brief description of the Diagnostic Medical Sonography profession, the application procedure and admission requirements to Cuyahoga Community College's Diagnostic Medical Sonography program. When submitting the application, please be sure to follow all of the directions. You are encouraged to further investigate the profession on your own through research and contacting sonographers at hospitals and imaging centers.

Applications are accepted throughout the entire year; however, the Diagnostic Medical Sonography program only begins each Fall semester. In order for your application to be considered complete, your completed *Sonography Shadowing Experience* form **and** the grades for all the admission courses must be submitted to the Health Careers Enrollment Center. Only applicants with complete application files meeting the admission requirements are placed on the list for program acceptance and forwarded to the Program Director.

For more information about the program, be sure to visit the [Frequently Asked Question](http://www.tri-c.edu/programs/health-careers/diagnostic-medical-sonography/documents/fastfacts-dms.pdf) page of the Diagnostic Medical Sonography program web pages (<http://www.tri-c.edu/programs/health-careers/diagnostic-medical-sonography/documents/fastfacts-dms.pdf>).

Should a question arise concerning the application process, please call or write to:

Health Careers Enrollment Center
Cuyahoga Community College
Metropolitan Campus, MHCS 126
2900 Cuyahoga Community College Avenue
Cleveland, OH 44115
Phone: (216) 987-4247 or 987-4244

If the question concerning the Diagnostic Medical Sonography Program or profession is not answered in this information packet or on the Tri-C's Diagnostic Medical Sonography website under the [Frequently Asked Questions](#) link, please contact the Program Director, Denise Kinches at denise.kinches@tri-c.edu.

Thank you for your interest in the Diagnostic Medical Sonography Program at Cuyahoga Community College.

Cuyahoga Community College (Tri-C) offers an Associate of Applied Science degree in Diagnostic Medical Sonography (DMS). This cohort-style program consists of five consecutive semesters of study; courses must be taken in sequence in the semester they are offered. The sequence involves on-campus academic classes and a minimum of 1,200 hours of clinical scanning experience in an established Sonography Department. Clinical experience is during weekday, daytime hours.

Sonography provides several fields of specialization. Interested individuals must choose an area to specialize in when applying to the program. DMS is CAAHEP-accredited to offer training in the following specialties:

- General Sonography
 - Abdominal: sonographic evaluation of the organs of the abdominal cavity (i.e. liver, spleen, kidney, pancreas, and aorta), blood vessels, and superficial structures
 - Obstetrics/Gynecology: sonographic evaluation of the female reproductive system and pelvic cavity (i.e. uterus, ovaries, and pregnancy)
- Adult Cardiac Sonography: sonographic evaluation of the anatomy and blood flow of the heart, its valves, and related blood vessels
- Vascular Technology: sonographic evaluation and analysis of the blood flow of peripheral, cerebral, and abdominal blood vessels (i.e. carotid arteries, deep leg veins, and renal arteries)

The Diagnostic Medical Sonography Programs at CCC is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS) for all options. Current accreditation contact information is available at www.tri-c.edu/sonography.

WHAT IS ULTRASOUND?

Ultrasound uses high-frequency sound waves to create a diagnostic image of soft tissue structures and vessels within the body. These images are displayed on a monitor and stored digitally for interpretation by a physician. The Sonographer is responsible for creating images through direct contact scanning and to provide the interpreting physician with a summary of their technical findings.

WHAT DOES A SONOGRAPHER DO?

A Sonographer is a qualified health care professional that uses sound waves in the ultrasound frequency range to produce images of the liver, kidneys, heart, blood vessels, and the fetus in utero for the diagnosis of disease. This usage of sound waves to identify normal and abnormal anatomy assists the physician in the diagnosis and treatment of disease or in assessing the patient's condition and progress.

The Sonographer combines technical expertise with in-depth knowledge of anatomy, physiology, and pathology and physics to create diagnostic cross-sectional images using ultrasound energy. Responsibilities of the Sonographer include acquiring, evaluating, and correlating ultrasound images and related patient clinical data to be used by physicians to render a medical diagnosis. The Sonographer is responsible for maintaining accurate records, reviewing and recording pertinent clinical patient history and previous test results, performing the sonographic examinations and providing the interpreting physician with a summary of their technical findings.

In carrying out these responsibilities, the Sonographer must apply the acquired knowledge of physics, anatomy, physiology, pathology, patient care, ethics, assessment, and other related principles that are included in the program curriculum. If you are considering a career as a Sonographer, a strong science and math background is essential for your success. Since the field requires a high level of critical thinking, an individual should possess analytical and reasoning skills. You should be a self-motivated, responsible, independent, assertive, individual willing to continually learn new advancements, capable of and confident in making rational decisions and have a genuine interest to work with people under a variety of situations.

WHAT OPPORTUNITIES ARE AVAILABLE TO GRADUATE SONOGRAPHERS?

Employment opportunities are available nation-wide in both urban and rural areas. Growth is projected to continue well into the future. Sonographers find employment opportunities in hospitals, clinics, private practice physician offices, public health facilities, and diagnostic imaging centers. Additional career advancement opportunities for sonographers are in education, administration, research, and as education/application specialists, sales representatives, and technical advisors in commercial companies.

Typical starting range for a new Sonography graduate in the Greater Akron/Cleveland area ranges from \$25.00 to \$27.00 per hour. Often, sonographers take “call” and annual earnings reflect this increase.

Graduates of the Associate of Applied Science in Diagnostic Medical Sonography may continue their education by earning a Bachelor degree at various 4-year educational institutions in Ohio and across the nation after completing their course requirements.

HOW MANY STUDENTS DO YOU ACCEPT?

A total of 32-40 students are accepted into the Diagnostic Medical Sonography Program for each Fall Semester. This limited enrollment capacity of the Diagnostic Medical Sonography Program, like other Health Career Programs at Cuyahoga Community College, means that not all who apply can be accepted immediately. The number of students accepted into the program is determined by the availability of space in the hospital/clinical affiliates of the program. Candidates meeting all admission course and admission requirements will be accepted as having a completed application file. Applications are conditionally accepted on a first completed file/first-accepted basis. When the most recent program offering is full, remaining complete application files will be placed on a list for the next program offering. These applicants will be considered as alternates for vacancies that may occur in the earlier program offering.

WHAT COURSES ARE IN THE DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM?

The Program is five semesters comprised of general education courses, a Sonography core, and specialty option courses. The required general education courses may be taken prior to acceptance, while waiting for the next Program to begin, or during the DMS program. The Sonography core courses provide the necessary background and knowledge in the physics of sound waves, medical terminology, patient care techniques, scanning experience, and a capstone course. Hands-on scanning experience is provided at the on-campus lab and at various clinical affiliates. Specialty option courses expand on anatomy, physiology, pathology, and pathophysiology as they pertain to the sonographic specialty. Specific course descriptions are in Cuyahoga Community College's Catalog.

The admission courses provide the student with a solid foundation for the sonography classes. Retention of the course material presented in these courses is crucial for the student's success in the DMS Sonography Program, as the sonography course content assumes and expands on the knowledge gained from these prerequisites.

The program is cohort-style with most courses offered only once a year. **It is not possible to complete the Program in less than five semesters, nor can the Program be completed by extending the course of studies on a part-time basis.** Students cannot register for courses to fit their personal schedule as they would for other college degrees. Because of the level of difficulty and the required amount of studies, the Program requires a full-time commitment.

Clinical hours and on-campus class hours equate to full-time. **Clinical hours are scheduled during the day at hospitals and most on-campus lectures are offered in the daytime** also. However, a few required lecture courses are offered in the evening. Students usually have weekends free for study or practice. Students may choose to work on a part-time basis; however, work hours are not to interfere with course hours. Nearly all students find that concurrent employment involves the ultimate sacrifice of their personal time. A 5-semester course schedule is available in the [Frequently Asked Questions](#) document.

Students accepted into the Diagnostic Medical Sonography program may elect to study an additional option in their second year of the Program. Program accreditation requires a minimum length of 24 months to complete two concentrations due to the additional courses and workload; the completion of two tracks must take a minimum of six semesters to complete. Students successfully completing one or more options are eligible to apply to take the credentialing tests for those additional specialties with the ARDMS (American Registry of Diagnostic Medical Sonography).

Due to intensity of the Diagnostic Medical Sonography program, students are encouraged to complete as many of the general education degree requirement courses before they formally start the program.

DIAGNOSTIC MEDICAL SONOGRAPHY SEMESTER SEQUENCE
AAS in DMS with a Concentration in General Sonography (effective Fall 2016)

<u>Program Admissions Requirements</u>	<u>Credit Hrs.</u>
BIO 2331 Anatomy and Physiology I	4
BIO 2341 Anatomy and Physiology II	4
DMS 1071 Concepts of Physics in Diagnostic Sonography	2
DMS 1303 Introduction to Sonography	2
DMS 1320 Introduction to Sonographic Scanning	1
DMS 1351 Patient Care Skills	1
ENG 1010 College Composition I or ENG 101H Honors College Composition I	3
MATH 1410 Elementary Probability and Statistics I ¹	<u>3</u>
	20

<u>First</u>	<u>Credit Hrs.</u>
DMS 1311 Initial Sonographic Scanning	2
DMS 1401 Abdominal Sonography I (a)	4
DMS 1500 Gynecologic and Obstetrical Sonography (d)	4
MA 1010 Introduction to Medical Terminology I	2
PSY 1010 General Psychology or PSY 101H Honors General Psychology	<u>3</u>
	15

<u>Second</u>	<u>Credit Hrs.</u>
DMS 1940 Field Experience I	1
DMS 2301 Intermediate Sonographic Scanning	2
DMS 2401 Abdominal Sonography II (a)	4
DMS 2500 Obstetrical Sonography (d)	4
PSY 1060 Cross-Cultural Competency for Health Care Providers	<u>1</u>
	12

<u>Summer</u>	<u>Credit Hrs.</u>
DMS 1950 Field Experience II	2
ENG 1020 College Composition II or ENG 102H Honors College Composition II	<u>3</u>
	5

<u>Third</u>	<u>Credit Hrs.</u>
DMS 235A Sonographic Principles, Performance, and Safety ²	2
DMS 235B Doppler Principles and Instrumentation ²	1
DMS 2940 Field Experience III	3
DMS 2985 Physics Review	1
DMS 2991 Sonography Capstone	<u>1</u>
	8

<u>Fourth</u>	<u>Credit Hrs.</u>
DMS 2950 Field Experience IV	1
DMS 2981 Specialty Registry Review	1
DMS XXXX Diagnostic Medical Sonography Elective ³	1 - 3
HTEC 1110 Ethics for Health Care Professionals	<u>1</u>
	4-7

PROGRAM TOTAL 64-65

**DIAGNOSTIC MEDICAL SONOGRAPHY SEMESTER SEQUENCE
AAS in DMS (Cardiac or Vascular, effective Fall 2016)**

<u>Program Admissions Requirements</u>	<u>Credit Hrs.</u>
BIO 2331 Anatomy and Physiology I	4
BIO 2341 Anatomy and Physiology II	4
DMS 1071 Concepts of Physics in Diagnostic Sonography	2
DMS 1303 Introduction to Sonography	2
DMS 1320 Introduction to Sonographic Scanning	1
DMS 1351 Patient Care Skills	1
ENG 1010 College Composition I or ENG 101H Honors College Composition I	3
MATH 1410 Elementary Probability and Statistics I ¹	<u>3</u>
	20

<u>First</u>	<u>Credit Hrs.</u>
DMS 1311 Initial Sonographic Scanning	2
DMS 1601 Echocardiography I (a) or DMS 1700 Vascular Sonography (b)	4
DMS 235B Doppler Principles and Instrumentation ²	1
MA 1010 Introduction to Medical Terminology I	2
PSY 1010 General Psychology or PSY 101H Honors General Psychology	<u>3</u>
	12

<u>Second</u>	<u>Credit Hrs.</u>
DMS 1940 Field Experience I	1
DMS 2301 Intermediate Sonographic Scanning	2
DMS 2602 Echocardiography II (a) or DMS 2702 Vascular Sonography II (b)	4
ENG 1020 College Composition II or ENG 102H Honors College Composition II	3
PSY 1060 Cross-Cultural Competency for Health Care Providers	<u>1</u>
	11

<u>Summer</u>	<u>Credit Hrs.</u>
DMS 1950 Field Experience II	<u>2</u>
	2

<u>Third</u>	<u>Credit Hrs.</u>
DMS 1381 Cardiac Diagnostic Procedures	3
DMS 235A Sonographic Principles, Performance, and Safety ²	2
DMS 2940 Field Experience III	3
DMS 2985 Physics Review	1
DMS 2991 Sonography Capstone	<u>1</u>
	10

<u>Fourth</u>	<u>Credit Hrs.</u>
DMS 2650 Pediatric Cardiac Sonography (a) or DMS 2760 Transcranial Doppler Sonography (b)	1-3
DMS 2950 Field Experience IV	1
DMS 2981 Specialty Registry Review	1
DMS XXXX Diagnostic Medical Sonography Elective ³	1 - 2
HTEC 1110 Ethics for Health Care Professionals	1
	5-8

PROGRAM TOTAL 60-63

<u>DMS Technical Electives</u> Select from the following to fulfill DMS XXXX elective option, (double dipping of courses not allowed):	<u>Credit Hrs.</u>
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DMS 1381 Cardiac Diagnostic Procedures	3
DMS 2330 Sonographic Pathology	3
DMS 2450 Breast Sonography	2
DMS 2650 Pediatric Cardiac Sonography	3
DMS 2750 Principles of Vascular Imaging for Abdomen & Cardiac Sonographers	3
DMS 2760 Transcranial Doppler Sonography	1
DMS 2960 Supplemental Field Experience	2
DMS 2983 Supplemental Specialty Registry Review	1

¹ Math 1521 or higher will also be accepted.

² DMS 235A and DMS 235B together equate to DMS 2350

³ Select a DMS elective from the elective courses listed above. Additional course selection requires departmental approval.

The Diagnostic Medical Sonography Program uses the following grading scale for all of its course offerings. Individuals earning a letter grade below “C” in any Diagnostic Medical Sonography course fail to meet the program’s graduation requirements and will need to be repeated. Additionally, earning a letter grade of “D” or “F” dismisses the individual from the Program. The sonography profession requires an individual to make many independent judgments based on learned knowledge that affects the patient’s diagnosis. Retention and application of knowledge is critical in this profession.

%	Grade
93 up to 100	A
85 up to 92	B
75 up to 84	C
65 up to 74	D
Below 65	F

WHEN ARE APPLICATIONS FOR THE PROGRAM ACCEPTED?

The Diagnostic Medical Sonography program starts each Fall semester. **Completed applications are accepted all year long** for admission to the program. Applicants with incomplete application files will need to complete the missing required information before being considered for acceptance.

The DMS Program Director issues a letter indicating the class year for which the applicant is provisionally accepted into the DMS Program after receiving the complete application file. Final acceptance into the Program is contingent upon completing the required Program forms, along with an acceptable background check and finger print report.

ARE THERE ANY CREDENTIALING BOARDS FOR DIAGNOSTIC MEDICAL SONOGRAPHY?

DMS Program Graduates are eligible to apply for the board examinations administered by the American Registry of Diagnostic Medical Sonography (ARDMS). This organization awards the internationally-accepted credentials in the areas of diagnostic medical sonography, diagnostic cardiac sonography, and vascular sonography. Specialty areas within the sonographer credentials include abdomen, obstetrics and gynecology (RDMS); adult echocardiography (RDCS); and noninvasive vascular technology (RVT).

EQUAL OPPORTUNITY EDUCATIONAL PROGRAM

The Diagnostic Medical Sonography Program is an equal opportunity educational program conforming to the state and federal guidelines. This program does not discriminate on the basis of age, color, creed, disability, marital status, national origin, race, or gender. In order to protect the privacy of its applicants, information on identified individuals to third parties may be released only after receiving written permission from the candidate involved, in compliance with FERPA guidelines.

WHAT KIND OF FINANCIAL AID IS AVAILABLE?

Students may be eligible for loan and scholarship programs including National Direct Student Loans, Pell Grants, Supplemental Educational Opportunity Grants, Guaranteed Student Loans, Ohio Instructional Grants, and General Scholarship Awards. Veterans may qualify for VA assistance. More information on financial aid can be found at the [Financial Assistance Department](#) website.

STUDENT FEES

Semester credit rates are published on the Tri-C website, www.Tri-C.edu. Other expenses that the student Sonographer should be aware of include, but are not limited to:

Immunizations & Drug test	Course Fees	Liability Insurance
Physical Examination Cost	Transportation/Parking	Health Insurance
Course books and materials	Hospital Uniforms, shoes, & lab coat	CPR Certification
Professional societies dues	Conference Fee	Clinical Report fee
Background Check	Campus security/maintenance fee	Registry exam fee

DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM ADMISSION REQUIREMENTS

I. COMPLETION OF THE FOLLOWING ACADEMIC REQUIREMENTS:

A. COLLEGE APPLICATION ADMISSION FORM (if you are a current Tri-C student, do not resubmit any of the information in Section I.A. that you have previously submitted)

Applicants need to have been accepted to the College by having completed a College General Admission application. The admission letter indicating approval of your application admits you to the College, not to the Diagnostic Medical Sonography Program.

1. HIGH SCHOOL TRANSCRIPT

Applicants must be graduates of an accredited high school in the United States or submit General Education Development (GED) scores, which show evidence of successfully passing the GED test with a score of 145 or better or a GED equivalency as evaluated by the Ohio Department of Education.

2. OFFICIAL TRANSCRIPTS

An official set of transcripts of all academic records from all schools, colleges, and universities attended outside of Cuyahoga Community College are to be on file with the Enrollment Processing Center, PO Box 5966, Cleveland, OH 44101. **Do not send transcripts** with the Health Careers application; the DMS program will use the ones you have on file with the College. Expect approximately 3 to 4 weeks for transcript evaluation.

Transfer students from other Diagnostic Medical Sonography programs need to meet the same procedure and requirements as outlined for admission to Cuyahoga Community College and to the Diagnostic Medical Sonography Program.

Foreign transcripts should be submitted early for translation and evaluation. Contact the Enrollment Center for specific guidelines, cost, and time frames.

B. HEALTH CAREERS APPLICATION

Applicants need to complete and submit an on-line [Health Careers Application](#). Be sure to indicate your primary specialty option choice under the Diagnostic Medical Sonography program choice.

C. ACADEMIC ACHIEVEMENT REQUIREMENTS

Completion of the following admission courses with a grade of "C" or better.

Program Admissions Requirements

BIO 2331	Anatomy and Physiology I
BIO 2341	Anatomy and Physiology II
DMS 1071	Concepts of Physics in Diagnostic Sonography
DMS 1303	Introduction to Sonography
DMS 1320	Introduction to Sonographic Scanning
DMS 1351	Patient Care Skills
ENG 1010	College Composition I
MATH 1410	Elementary Probability and Statistics I

- Plan when you will take your admission courses taking into consideration that some of the courses have prerequisite or co-requisite requirements or are only offered once a year.
- Health Career programs do not accept Pass/No Pass grades for admission courses taken at Tri-C.
- A letter grade of "C" or better must be achieved.
- Biology and Math requirements should be scheduled early in your course plan; delaying them delays your application from being complete.
- Only two of the admission courses may be repeated once to improve from a previous attempt. A "W" is counted as an attempt.
- **Minimum 3.0 GPA for DMS 1303, DMS 1320 and DMS 1071 (total 5 credits).**
- **Minimum 3.0 GPA for BIO 2331 and BIO 2341 (total 8 credits).**
- Admission GPAs calculated using only the Tri-C specific admission course credit hours listed above.
- If you transferred in college courses, such as English, Math, Physics, Psychology, or Anatomy & Physiology, you will need an override to register for the some of the admission courses. Contact a counselor or the Diagnostic Medical Sonography program Director for an override; you will need to provide them your Tri-C student ID number and the course section number (CRN).
 - Only the credit hours attached to the required Tri-C equivalents are used to calculate the admission GPAs regardless of the number of credits the accepted for the transfer course.
- There are no time limits for required courses; due to their importance, the course content is built upon (not reviewed) in the remaining Program courses.
- Minimum Tri-C cumulative GPA of 2.4 must be maintained during the entire length of the Program.
- **Test of English as a Foreign Language (TOEFL)** is required if English is spoken as a second language. A minimal iBT score of 24 is required in the speaking skill component and a minimal iBT score of 22 is required in the listening skill component. Go to www.ets.org for more information about these tests. The student is responsible for arrangements and costs incurred for the TOEFL. This test must be taken even if you are an American citizen or have taken ENG 1010. Students should consider the following coursework to assist them: ESL Speaking English III and Special Topics in ESL: TOEFL Preparation.

II. ADDITIONAL ADMISSION REQUIREMENTS:

SHADOWING EXPERIENCE

- The required shadowing experience provides the future sonography student with a clearer insight into the role and responsibilities of the sonographer and the medical environment in general. Our clinical sites welcome shadowing experiences by prospective students. Schedule an 8-16 hour "shadowing" experience with a hospital. You will need to call the hospitals of your choice to arrange this experience. If you want to do your shadowing at a Cleveland Clinic Health System hospital, contact Amy Graska at amgras@ccf.org or 440 695-4297 who will assist you in making arrangements.
- Applicants will need to schedule an 8 - 16 hour "shadowing" experience with a hospital that performs sonographic exams in which 50% of the exams observed are performed on in-patients. This experience provides the student with an excellent perspective of a sonographer's responsibilities and their work environment. The shadowing experience should be split into two sessions at different hospital sites to receive the greatest benefit.
- Applicants must complete a *Sonography Shadowing Experience* form as an admission requirement to the program. Contact a sonography lab at a hospital in the specialty you are interested in to arrange this experience. Applicants unsure of what specialty option they would like to pursue are encouraged to contact the ultrasound lab, the echo lab, and the

vascular lab at a hospital and arrange to 'shadow' a sonographer in each specialty to gain insight as to how each differs.

- **Dress professionally** on your shadow day. Remember, you will be making an impression on the staff and patients at the site. Patients may decide not to let you into the room if they think you are not serious about healthcare and their welfare.
 - Casual wear is not acceptable (ex. jeans, leggings, revealing clothing, sandals).
 - You should bring a white jacket, scrub jacket or lab coat if available so that you 'blend in' with the rest of the hospital staff.
 - Your cell phone should be stowed while shadowing; it can be a HIPAA violation should you have it around a patient, their visitors, or their medical records.
 - Bring proof of your last influenza immunization.
- While at a shadowing experience, you must adhere to the standards and rules of the hospital site. Applicants that do not meet the site's standards or follow all of the directions or rules can expect to be denied the experience and asked to leave.

EVIDENCE OF GOOD HEALTH

Because the work of a Sonographer frequently deals with life and death situations, our clinical affiliates mandate that the student submit evidence of good health (verified by a physical examination), appropriate immunizations, (including the influenza immunization), and evidence of current certification in the basic life support course for health care providers. These requirements are to be met after admission to the program and before their first clinical assignment. Students will be dropped from the program if significant limiting health conditions are present which prevent the student from performing the normal functions of a student Sonographer and/or constitute a hazard to the health or safety of patients.

III. ABILITY TO PERFORM ESSENTIAL FUNCTIONS

TECHNICAL STANDARDS

Students accepted into the Diagnostic Medical Sonography program must meet specific technical standards fundamental for successful and competent performance in sonography as determined by the essential functions performed by sonographers in practice. The ability of each student to meet the technical standards is determined through a physical examination conducted by a physician and competency evaluation meeting the level of proficiency required by the faculty. Entrance and progression in the Diagnostic Medical Sonography program requires the following physical, mental, and emotional/psychological attributes and communication skills. Students must be able to meet these requirements with or without a reasonable accommodation. Questions regarding possible inability of any of these functions can be directed to the Diagnostic Medical Sonography Program Director at 216 987-5564.

Physical Attributes

Must have discriminating visual capabilities for proper evaluation of the patient and ultrasound image consistent with the abilities to assess asymmetry, discreet tissue texture changes and color distinctions under dimmed lighting.

Must be able to distinguish audible sounds to hear information crucial for an appropriate response essential for the safe, effective care and treatment of patients.

Must be free from health or medical disorders that limit the physical ability to perform, completely and efficiently the duties of a sonographer without risk to self or others.

Must have manual ambidexterity and adeptness to coordinate the hands and eyes for manipulation of sonographic equipment controls, keyboard, and monitor while performing a procedure.

Must have the physical stamina to complete the required course of didactic and clinical study according to established procedure and standards of speed and accuracy. Long periods of sitting, standing or moving are required in the classroom, laboratory, and clinical settings.

Must have the strength and mobility required for activities associated with daily practice, with emergency situations, and with invasive sterile procedures. Specifically required:

- Ability to lift, handle and carry ultrasound accessories of up to 40 pounds in weight.
- Ability to move/transfer and skillfully position patients weighing up to 400 pounds.
- Ability to stand, sit, bend and stoop for long periods in a dimly lit room for up to 12 hours a day.
- Ability to push, pull and manipulate a mobile ultrasound machine weighing up to 600 pounds for patient bedside exams.
- Must have full use of both hands, wrists, and shoulders.
- Must be able to transfer patients to and from wheelchairs, stretchers, or beds.

Mental Attributes

Must possess the ability to think in the abstract, specifically, to be able to comprehend three-dimensional relationships and understand the spatial relationships of structures.

Must possess and utilize the mental ability to apply previously learned knowledge. Application of this knowledge includes the ability to measure, calculate, rationalize, analyze, integrate, and synthesize in a timely fashion according to established procedure and standards of speed and accuracy.

Must make appropriate judgment decisions in routine and emergency situations, and in situations not clearly governed by specific guidelines.

Must be free from health or medical disorders that limit the ability to perform, completely and efficiently, the duties of a sonographer without risk to self or others.

Emotional/Psychological Attributes

Must possess the emotional health and stability required for the full utilization of their intellectual abilities, for the exercise of good judgment, for the prompt completion of all responsibilities attendant to the diagnosis and care of patients without risk to self or others.

Must be able to tolerate mentally, and emotionally taxing workloads and function effectively under stress.

Must be able to display flexibility, versatility, dependability, diplomacy, compassion, integrity, motivation, and interpersonal and professional skills at all times in the clinical and didactic setting.

Must be free from health or medical disorders that limit the emotional/psychological ability to perform, completely and efficiently, the duties of a sonographer.

Communication Attributes

Must show evidence of effective and appropriate written and verbal English communication skills throughout the program to all persons in both the academic setting and the clinical health care setting. Communication includes speech, reading, writing and non-verbal behavior and actions.

Must have the ability to relate information to and receive information from patients in an accurate, empathetic, ethical, and confidential manner.

Must be able to understand and convey information essential for the safe and effective care of patients in a clear, unambiguous, and rapid fashion in emergency situations.

Students with Disabilities

If you need course adaptations or accommodations because of a disability, contact the ACCESS office, 216-987-5079, TDD 216-987-5117. Although a student's self-identification as a person with a disability is voluntary, the Diagnostic Medical Sonography Program can only accommodate the instructions provided by the College's Access office.



PROOF OF SONOGRAPHY SHADOWING EXPERIENCE

Student Name: _____ Tri-C Student #: _____

Name of Clinical Agency: _____

Clinical Agency Address: _____

City _____ State _____ Zip _____

Area Code _____ Phone _____

Department/Specialty (check all that apply for this experience)

Abdomen Gynecologic Obstetrical
Cardiac Vascular Other: _____

Shadow Date(s): _____ Total Number of Hours: _____

Supervising Registered Sonographer's comments about applicant's contributions and skills:

Describe the student's reactions and comments while at your site?

Signature: _____ Date: _____
(Supervised By)

Student Questionnaire

In what way did this observation experience motivate you to pursue your education in Diagnostic Medical Sonography?

Describe the schedule, routines, and activities that occurred while you were participating within the clinical setting:

Describe one activity you participated in or observed.

In what areas of working with patients did you feel most comfortable?

In what areas of working with patients did you feel the most uncomfortable?

In what areas of working with the patients did you feel you need more knowledge and/or skills?