

Dear Prospective Diagnostic Medical Sonography Student:

We are pleased that you are considering the Diagnostic Medical Sonography program. This "FAQ" page will answer many of the common questions about the program. It may also raise additional questions which can be answered during a counseling session or by contacting the Diagnostic Medical Sonography faculty in the Division of Allied Health and Nursing (Ext. 7189).

Craig Peneff Director,

Diagnostic Medical Sonography

Allied Health & Nursing Lorain County Community College

Program Information

As a diagnostic medical sonographer, you will be responsible for completing general sonographic procedures, including abdominal, obstetrics, gynecologic and vascular studies under the direction of a physician. The Diagnostic Medical Sonography program at LCCC offers you the opportunity to integrate classroom theory instruction with College laboratory application and practices, as well as hands-on experience in local health care agencies. In the agencies, a mentoring registered sonographer will provide instruction, guidance and supervision. The curriculum for the diagnostic medical sonography program consists of didactic, laboratory and clinical instruction in abdominal, obstetric/gynecologic, and vascular studies as well as ultrasound physics, instrumentation and Doppler principles.

The Diagnostic Medical Sonography Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS). Entry into the program does not require any previous medical background. An Associate of Applied Science Degree is awarded upon graduation.

Upon completion of the 18-month program in Diagnostic Medical Sonography, you will be eligible to take national certifying examinations through the American Registry of Diagnostic Medical Sonography (ARDMS) and work as a sonographer. Options beyond graduation include continuing your education in other specialties in sonography.

What personal characteristics are needed to be successful in Diagnostic Medical Sonography?

Students who are successful in Diagnostic Medical Sonography are emotionally mature, academically able, highly motivated, self-disciplined and willing and able to devote a considerable amount of time to their program. They are patient and enjoy working with and serving people. They are able to physically move patients. They are able to follow directions provided by their supervisor, radiologists and physicians.

Based upon job performance tasks, the entry-level graduate sonographer will be utilizing all of his or her sensory perceptions as well as mental and intellectual skills in the verbal, written and mathematical areas. Certain physical characteristics of the profession will have physical demands placed on the sonographer.

To expand on this, the following general attributes (technical standards) are necessary for entry-level positions in Diagnostic Medical Sonography.

Language Arts/Communications

Verbal

The sonographer:

- speaks clearly, concisely and employs correct vocabulary and grammar for communication with staff, physicians, students, faculty, patients and the public.
- gives verbal instructions to patients.
- explains procedures to patients and responds to patients' questions and concerns.
- presents an oral summary of the ultrasound exam.

Written

The sonographer:

- writes Preliminary Reports dictated by the radiologist.
- describes in writing various types of incidents that occur to the patient.

- writes on patient charts and requisitions using correct grammar, spelling, punctuation, sentence structure and appropriate medical terminology.
- writes a summary of the ultrasound exam.
- writes legibly.

Sensory Attributes

Visual

The sonographer:

- confirms the patient's identity from the identification band and x-ray number.
- reads the physician's orders and requests, as well as the patient's clinical history from the request and chart.
- finds and reads the laboratory results in the patient's chart.
- observes the patient for shock or respiratory distress.
- identifies normal and abnormal anatomical structures on the various diagnostic imaging procedures.
- identifies subtle tissue variations on the image display.
- adjusts various equipment settings to create optimal images.
- works in a dimly lit room watching a TV monitor for long periods at a time.
- performs safety checks on the equipment.

Auditory

The sonographer:

- uses a stethoscope to take blood pressure and hear blood flow.
- acquires a brief medical history from the patient and records the verbal responses of the patient.
- listens to Doppler flow patterns during vascular studies.
- answers telephones and acquires pertinent information.
- listens and follows verbal directions from physicians, supervisors, and other medical personnel to acquire pertinent information and orders.

Touch

The sonographer:

- touches the patient with the ultrasound probe to obtain images.
- touches the patient to provide moving assistance and patient care.
- touches the patient to palpate masses in assessing the patient.

Body Mechanics and Physical Characteristics

The sonographer:

- moves patients by lifting and sliding.
- pushes mobile sonographic equipment from the sonography department to the operating room, emergency room and to the patient's room.
- moves patients for proper positioning on the exam cart.
- uses eye-hand coordination to perform the sonographic exam and make equipment adjustments.

- stands and/or sits for extended periods of time while performing sonographic examinations and other responsibilities of the job.
- must have full use of both hands, wrists and shoulders to hold the ultrasound probe, type on a keyboard and adjust machine controls and monitor.
- grips the ultrasound probe for extended periods of time (often exceeding 30 minute intervals).
- presses, angles, and slides the ultrasound probe to obtain required images.
- reaches to full arm extension for extended periods in order to obtain required images.

Intellectual and Mental/Emotional

Intellectual

The sonographer:

- uses algebra in solving physics problems.
- uses equipment in quality control.
- uses rote memorization and recall in fulfilling exam protocols.
- performs patient assessments.
- uses cognitive skills to assure proper operation and adjustment of sonographic equipment.
- uses cognitive skills to recognize normal and abnormal sonographic patterns, and integrates this knowledge with patient's history, to assist the physician with diagnoses.
- uses cognitive skills for abstract concepts in applying physics principles to perform sonographic and Doppler examinations.
- demonstrates knowledge of normal anatomy, physiology and disease processes.
- integrates laboratory test results and/or patient history with orders for sonographic procedures.
- uses independent judgment and decision making to image pertinent structures to demonstrate the presence or absence of pathology.
- uses independent judgment and decision making to modify an exam based on patient condition, situation, and/or pathologic findings.
- correlates the ordered exam with patient's clinical symptoms and laboratory results.
- assesses the patient's ability to tolerate procedures.
- evaluates any contra-indications to the procedure, such as medications, insufficient patient preparation or the patient's inability or unwillingness to tolerate the procedure.
- performs measurements and calculations according to protocols.
- uses independent judgment and systematic problem-solving methods to produce high quality diagnostic information and optimize patient care.

Mental/Emotional

The sonographer:

- performs procedures in the emergency room, operating room, and intensive care unit.
- participates in procedures related to fetal malformations, fetal death, and invasive procedures such as biopsies and fluid aspirations.
- is required to make independent decisions and accept a high level of responsibility.
- interacts with trauma patients, chronically ill patients, acutely ill patients, and terminally ill patients of all ages.
- provides service to all patients, regardless of age, sex, race, national origin, religion, or physical condition and disease process.

These attributes are also integrated into our educational process in the form of academic and clinical performance objectives. If you feel that because of a learning disability, physical disability, or mental/emotional condition you would have a problem accomplishing these entry-level skills, then please make an appointment with the following: an academic counselor, the coordinator of the Office of Special Needs Services, and a faculty member of the Diagnostic Medical Sonography program. Having a special need may not preclude you from entering the program.

What basic academic skills are needed in the Diagnostic Medical Sonography program?

Students who are successful in Diagnostic Medical Sonography have good skills in reading, writing, mathematics and science. It is imperative that one has a very strong math and science background. Anatomy & physiology, Algebra, physics, college composition, basic patient care skills and basic medical terminology at the College level are required for admission to the program.

What can I do if I have not had these courses or my skills are weak?

The College offers course work in developmental education if the College placement assessment process or high school transcripts indicate remedial work to be necessary to satisfy academic deficiencies. Your counselor can recommend specific courses to fit your situation.

How long will it take before I can start the clinical portion of my program?

Because there are more applicants to the Diagnostic Medical Sonography program than spaces available, it is necessary that you complete a **Program Application** with a counselor or academic advisor. The actual length of time it will take to begin the clinical portion of the program depends on the number of people who have filed program applications and those applicants meeting the program entry requirements. Until you are notified of a place in the class, we recommend that you do not make major changes in your life, such as quitting a job or moving.

When does the first Diagnostic Medical Sonography course begin?

The Diagnostic Medical Sonography courses begin only in the spring semester.

How can I be eligible to apply for the Diagnostic Medical Sonography program?

The application procedure for the Diagnostic Medical Sonography program is as follows:

1. Apply to the college
2. Send all official, final high school and all college transcripts to the LCCC Records office.
3. Complete a Transcript Review Request. Allow a minimum of 12 weeks from the date that these documents are received by the LCCC Records office, for the completion of the transcript evaluation and GPA audit.
4. Meet with a counselor in the Connections Center (Admissions) after you are notified of your transcript evaluation results.
5. Demonstrate proficiency in Writing, Reading and Algebra by taking the Compass or Asset placement assessment. All required developmental courses (as indicated by your results) must be completed with a minimum grade of "C." Specific requirements for waiver of assessment are provided in the current LCCC Catalog. (Note to transfer students: All transcripts must be evaluated before the need for assessment can be determined).
6. Complete all pre-admission course requirements (or college level equivalents) with a minimum grade of "C." Pre-admission course requirements include:
 - Anatomy & Physiology I (BIOG 121)
 - Technical Math (MTHM 121)
 - College Composition (ENGL 161)
 - Introduction to Medical Terminology (ALHN 112)
 - Introduction to Patient Care (ALHN 113)
 - Physics for Allied Health (PHYC 115)
 - The College Experience (SDEV 101)

When am I able to submit an application for the Diagnostic Medical Sonography program?

A Program Application may only be submitted once all pre-admission requirements have been fulfilled. The yearly application deadline for students seeking admission to the Sonography program is January 5.

- A 2.5 comprehensive grade point average is required for application and admission to the program. All undergraduate, transfer/transient grades will be included in the calculation of the grade point average.
- A maximum of 2 physical education grades will be included in this calculation
- Forgiven, repeated, and Developmental Education course grades will be excluded.
- An applicant who fails to maintain a comprehensive 2.5 grade point average will be removed from the admission pool and will not be considered for program admission. Once removed from the pool, the applicant must then meet all program pre-admission requirements prior to completing a new application.
- Changes in grade point average and/or credits posted made after the deadline will not be considered when the application is reviewed for admission.

All applicants are required to complete 16 hours of observation at 2 different ultrasound facilities. One facility must be a hospital. There is a form that needs to be signed by the staff at the facility. This form is available from the Connections Center. The observation hours can be obtained any time and are recommended to be completed prior to submitting a program application.

What if I am already a health-care professional such as an x-ray technologist or a registered nurse?

Graduates of allied health and nursing programs in other fields may be eligible for credit through prior learning assessment. Prior to the submission of a program application, these individuals must: (1) be a graduate of a recognized, accredited allied health science program that is patient-care related, and hold certification/licensure/registry in the profession, i.e., Radiologic Technology, Registered Nursing, etc., (2) complete Physics for the Allied Health Sciences (PHYC 115 or an equivalent course) and Technical Mathematics (MTHM 121 or an equivalent course) with a minimum grade of "C," (3) obtain official transcripts from each college/university attended, and (4) schedule an appointment with the Program Director, Craig Peneff, (Health Sciences Building, Room 223, 1-800-995-5222, ext. 7189).

- Registered Nurses and Licensed Practical Nurses may be exempt from Introduction to Medical Terminology (ALHN 112) and Introduction to Patient Care (ALHN 113), upon review of their transcripts by the Program Director.
- Radiologic Technologists may likewise be exempt from Introduction to Medical Terminology (ALHN 112), Introduction to Patient Care (ALHN 113), Physics for the Allied Health Sciences (PHYC 115), and Imaging Modalities (SONO 122) upon review of their transcripts by the Program Director.
- Applicants with prior professional experience/training not specifically cited here may be eligible for exemptions/substitutions and are strongly encouraged to contact the Program Director for an individual evaluation.

How are students selected for admission into the Diagnostic Medical Sonography Program?

Admission to the program is selective. It will be based upon final verification of the completion of program preadmission requirements. Program admission will be based upon the following criteria (listed in order of consideration): 1) total number of college credit support courses (see below) completed applicable to the SONO curriculum (credits for the SDEV 101 and "in progress" courses will not be counted; 2) date of application; and 3) grade point average.

Applications are reviewed for admission to the SONO program once a year; and will be processed in the order in which they are received.

The support courses in the program that are required include:

- Anatomy & Physiology II (BIOG 122)
- Cross-sectional anatomy (BIOG 123)

- General Pathology (ALHN 121)
- Interpersonal Communication or Oral Communication (CMMC 165 or CMMC 151)
- Intro to Psychology or Sociology (PSYC 151 or SOCI 151)

What if I have completed my support courses many years ago?

It is strongly recommended that applicants who have not completed Physics for Allied Health Sciences (PHYC 115), Technical Mathematics I (MTHM 121), and Anatomy & Physiology II (BIOG 122) within the last five years, consider auditing them as a refresher. Applicants who have not completed Technical Mathematics I (or an equivalent course) must take the Mathematics portion of the Compass placement assessment; and complete all required courses as indicated by the assessment scores with a minimum grade of "C."

Are there courses that must be taken before other courses?

Yes. These courses are called prerequisites and they are marked on the curriculum sheet. Course prerequisites are listed in the College catalog. A College catalog will be issued to new students at the time of admission. Additional copies may be picked up in the Connections Center, Records, or Marketing offices. Please note: Students who do not meet the prerequisites will not be permitted to continue in the Diagnostic Medical Sonography program. Please be aware that completion of ALHN 112, ALHN 113, PHYC 115, MTHM 121, BIOG 121, ENGL 161, and SDEV 101 are required prior to submitting an application for the diagnostic medical sonography program.

What are some things I should be aware of as I am scheduling the pre-admission and support courses for the Diagnostic Medical Sonography program?

If the Math Assessment test determines that you need additional math courses before being eligible for the Technical Mathematics I (MTHM 121), it is best to plan the math courses first, then the Anatomy & Physiology courses.

- Physics for Allied Health Sciences (PHYC 115) cannot be taken unless you are taking or have completed Technical Mathematics (MTHM 121).
- General Pathology (ALHN 121) and Cross-sectional Anatomy (BIOG 123) cannot be taken unless you are taking or have completed Anatomy & Physiology II (BIOG 122).

After the Math and the Anatomy & Physiology courses are planned, build the remaining support courses around them to complete your schedule for each semester. As you plan your course schedule, **please note:**

- **Cross-sectional Anatomy (BIOG 123), Physics for Allied Health Sciences (PHYC 115), and the Introduction to Medical Terminology (ALHN 112) courses are not offered during the summer.**

These tips should help you complete all of the support courses in a timely fashion and improve your chances for program entry.

What courses should I begin and how many?

This should be discussed with your counselor, taking into consideration your educational background, work and personal obligations, and when you will enter the clinical part of the Diagnostic Medical Sonography program. Please note that you must meet the criteria listed on the **Program Application** to be considered for admission to the program.

How will I know when I have been accepted into the Program?

Admission notification into the sonography program will not occur until fall semester. You will be notified by mail and there will be a deadline date by which you must respond. A letter notifying you of acceptance into the Sonography Program will give you detailed instructions on the registration process.

After being accepted into the Diagnostic Medical Sonography program, what other things must I have before starting classes?

- All students entering the diagnostic medical sonography program must complete a **background check** through an outside agency and processed through the Ohio Bureau of Identification and Investigation with the results available to any potential clinical agency.

Those who have not been Ohio residents for five years will also need to have an FBI Web Check. Any infractions showing on the background check may result in the student being potentially denied placement in any clinical agency and result in the student being unable to progress to completion in the program. Furthermore the certification agency may reject anyone for who has a positive background check for examination eligibility. Students will be given specific information regarding the background check at the program orientation meeting.

- A **physical examination** is a requirement for entrance into the clinical part of the Diagnostic Medical Sonography program and must be completed at the student's expense. Students will be given specific information regarding the physical examination at the program orientation meeting.
- All students must hold the **American Heart Association (Basic Life Support) certification** as a Health Care Provider prior to beginning the sonography classes. This requirement may be completed at LCCC by taking HLED 153, Basic First Aid & Safety (2 cr.) or HLED 154, Cardio-pulmonary Resuscitation (1 cr.) Additionally, NEMS 150, BLS for the Healthcare Provider (CPR) or NEMS 151, BLS for the Healthcare Provider (CPR) Refresher are offered at LCCC on a non-credit basis. The student must be re-certified by taking and passing a refresher course, if the certification expires while enrolled in the sonography courses. The re-certification must occur before the current certification expires or the student will not be able to attend the clinical facility.

How many seats are available in the program?

The program accreditation limits the program to a maximum of 15 students. The total number of students entering the program may be less than 15 depending on the number of approved clinical facilities available for student experience.

Can I re-enter the program if I withdraw?

Yes. Students who withdraw from the program without completing the first Diagnostic Medical Sonography courses (SONO 131/122) should immediately file a new Program Application. These student applications will be considered with others in the admission pool.

Students who complete the first Diagnostic Medical Sonography courses or beyond and withdraw should see the Allied Health and Nursing counselor immediately if they wish to be considered for re-entry. Re-entry students are admitted, as seats become available. Due to the skills required in the program, re-entry students will be required to satisfactorily complete all open lab activities to align their skill level equivalent to that point in the program. Students who do not re-enter the year after withdraw will be required to reapply to the program and audit any core sonography courses previously completed. Students must meet program health requirements prior to re-entry. Students should not withdraw from the program without discussing their situation with a member of the Diagnostic Medical Sonography faculty and the Allied Health and Nursing counselor. Formal withdrawal procedures must be followed.

Can I take the Diagnostic Medical Sonography courses on a part-time basis?

No. Due to the development of necessary skills, integration of the material as one progresses through the professional portion of the program, and the limited number of clinical seats, it is not possible for students to go through the program on a part-time basis.

Are sonography courses available during the evening or weekend?

The didactic and clinical coursework are primarily given during the day. However, some courses may be given during the late afternoon/early evening to coincide with the required clinical hours. For example, during the fall semester Ultrasound Physics and Instrumentation II (SONO 222) course is typically offered from 4-6, one day a week. This allows the students to attend the clinical facility during the morning hours. It is also important to note that sonography students have required open laboratory hours each semester that may require the student to attend during the evening hours or on Saturdays.

Typically only one section of the sonography courses is available, thus students do not have an option to schedule alternative lecture sections such as an evening or weekend section. However, many of the preadmission and support courses have evening and/or weekend sections offered.

What facilities are used for the Diagnostic Medical Sonography clinical experience?

The Diagnostic Medical Sonography program uses hospitals and other medical facilities in northern Ohio; these may include Lorain, Cuyahoga, Summit, and Erie counties. The general guide for selection of facilities is that the facility be approximately within a one-hour drive from LCCC. The facilities of EMH Regional Medical Center, Community Health Partners, Southwest General Hospital, Cleveland Clinic Foundation and MetroHealth Medical Center have been used.

Will I do all my training at one hospital?

No. The vast majority of your training will normally take place at various facilities. The types of patient exams and clinical opportunities vary at each clinical facility. In order to provide each student with variety of clinical experiences as well as providing equity of the experiences offered to each student, it is necessary to have students rotate to various clinical sites.

Is transportation provided to the hospital?

No. Students must provide their own transportation. Students must have a reliable car to drive to their assigned clinical site, which may be some distance from LCCC. Students may be required to pay for parking at some facilities.

What kind of time investment does this program involve?

The Diagnostic Medical Sonography program requires a considerable investment of time. It is estimated that approximately 3 hours of studying is required for every hour of instruction. Throughout the program, students are obligated to approximately 40 hours per week from the combination of lecture, clinical, lab and open lab hours. The courses often require completion of assignments and projects in addition to studying. The program requires completion of 1,230 hours of clinical education in addition to all classroom and college laboratory time. This means that in addition to classes, clinical education is equal to twenty-one 40-hour work-weeks. During the clinical education, all learned procedures must be tested and competency must be demonstrated.

How is the Diagnostic Medical Sonography program set up?

- (1) Day lectures are held at the College two days a week in the Diagnostic Medical Sonography major courses. Evening classes may be required in non-professional (support) courses as well as required open laboratory hours.
- (2) Day college laboratory sessions are held, during which you will learn and practice basic procedures with your instructor. The number of hours and days depend on how far along you are in the program.
- (3) Clinical experience is held throughout the program. One day a week during the first semester but increases to 3 to 4 days per week as the student progresses through the program. Clinical experience is primarily scheduled for day hours; evening and Saturday hours may also be offered or required depending on the facility.
- (4) Required practice labs are scheduled to provide students an additional 1-2 hours each week for skills practice.
- (5) In addition to this, it is important to have good skills in time management because you must add to your schedule: study time, independent library time, and practice in the College sonography laboratory.

An example schedule for a sonography student is listed below. Please keep in mind that course times are possible to change depending on faculty and room availability:

Spring semester – Monday & Wednesday: 8-10:20 Introduction to sonography lecture;
12-3 – Lab
Tuesday (or Thursday) - Clinical (8 hrs)
Wednesday: 10:30 – 12:15 lecture (Orientation to DMS/Imaging Modalities)
Friday; 9-12 Lab (second lab group Wed. and Fri. 1-4)
Open Lab – 2 hours 1 evening or Saturday (may not be consecutive hours)
Summer Semester (10 weeks)
Monday, Wednesday and Friday- Clinical 8 hrs (24 hrs/week)
Tuesday & Thursday – 8-11:50 Abdominal Pathology Lecture; 1-2:20 Ultrasound
Physics and Instrumentation I Lecture
Lab – 2:30 –5:30 (Tuesday or Thursday)
Open Lab – 2 hours 1 evening or Saturday (may not be consecutive hours)

Fall Semester –

Monday, Wednesday, Friday, and Tuesday or Thursday morning – Clinical 28 hrs/wk

Tuesday or Thursday - 10 – 12 – Lab; 1-3:30 OB/GYN Pathology

Tuesday - 4-6 Ultrasound Physics and Instrumentation II

Open Lab – 2 hours 1 evening/week or Saturday (may not be consecutive hours)

Spring Semester –

Monday, Tuesday, Wednesday, and Friday – Clinical (30 hours/wk)

Thursday 9-12 Advanced studies; 1-3 Professional Issues; 3-4 Lab

Open lab – 2 hours 1 evening/week or Saturday (may not be consecutive)

Will I have to go to summer school?

Yes. There are two required Diagnostic Medical Sonography courses in the summer between the first and second years of the program. This includes 13.5 hours of class and 24 hours of clinical education each week for 10 weeks.

Will I be able to schedule required support courses (non-Diagnostic Medical Sonography) at times near or convenient to my Diagnostic Medical Sonography classes?

Because the number of contact hours of the Diagnostic Medical Sonography courses and clinicals, it is often necessary for students to schedule support courses at times that are not convenient. Students may have to take a required course in the evening.

Because the Diagnostic Medical Sonography program is very demanding on one's time with lecture, laboratory, clinical and studying, it is recommended to complete as much of the required support courses (non-diagnostic medical sonography) prior to starting the Diagnostic Medical Sonography program.

What suggestions do you have that would increase the likelihood of my being successful in Diagnostic Medical Sonography?

First: Make up whatever deficiencies you have in the basic skills of reading, writing, math and science. Your counselor will help you determine these.

Second: Take as many of the non-sonography (support) courses as possible before entering the Diagnostic Medical Sonography program. If it is not possible to take all of the courses, try to complete the science courses. It is recommended that students complete their science requirements no more than one academic year prior to admission to the clinical program. It is required that students achieve at least a grade of "C" in their science and mathematics courses. Remember, the academic courses must be taken before, or along with, the Diagnostic Medical Sonography courses -- not afterward.

Third: Develop good study and time management skills.

Fourth: It is recommended that students work in or volunteer at a patient care setting for a minimum of 200 hours.

Fifth: Have the support and assistance of your family to minimize other responsibilities while in the program.

Students who are still in high school and who wish to enter the Diagnostic Medical Sonography Program must apply to the College and complete the required pre-admission courses for the Diagnostic Medical Sonography program. High school students may also wish to consider the Post-Secondary Enrollment Options (PSEO) program as a way of taking a few academic courses at the College while they are still in high school. A high school counselor can advise you if you qualify for the program.

How much does the program cost?

As of 2011-12 academic year, the tuition and lab fees including non-major courses is approximately \$7,000 (for Lorain County residents).

Other costs of the program, including textbooks, uniforms, etc. is estimated to be an additional \$2,500 to \$3,000.

Is financial aid available for Diagnostic Medical Sonography students?

Financial aid is available to qualified students through the Financial Aid Office. Allied Health and Nursing students are urged to make inquiry to determine if they are eligible. Many

scholarships/grants are available through the State of Ohio as well as the LCCC Foundation. Contact a financial services representative in the LCCC Financial Services Center, located in the College Center (ext. 4034). Also, scholarships are available through the Society of Diagnostic Medical Sonography Education Foundation (1-800-229-9506) or <http://www.sdms.org>.

Can I work while I am in the program?

A general College guideline indicates that students taking 12 or more hours (full-time) may work a maximum of 15 to 20 hours per week. Most Diagnostic Medical Sonography students find that they are not able to work at all while they are taking Diagnostic Medical Sonography courses.

How many hours of outside study will I need per week?

A general College guideline indicates that, on an average, students need two to three hours of outside study for each hour in class.

What accommodations are there for students with special needs?

The Office for Special Needs exists to serve the needs of students with disabilities - physical, learning and/or emotional. If you are a person with a disability who needs accommodations or assistance, contact the O.S.N.S. located in Room 115 in the Learning Resource Center. Phone – (440) 366-4058 or (800) 995-5222, ext. 4058

Does the college have baby-sitting services?

Yes. Inquiries should be made at the LCCC Child Care Center, (440) 366- 4038 or (800) 995-5222, ext. 4038.

What additional sources of information are there about Lorain County Community College and the Diagnostic Medical Sonography program?

You may contact Mr. Peneff, the Diagnostic Medical Sonography Program Director at (440) 366-7189 or (800) 995-5222, extension 7189, if you have additional questions after reading the FAQ.

Additional information about the field of Diagnostic Medical Sonography can be obtained from the Society of Diagnostic Medical Sonography at <http://www.sdms.org>.

What happens if I become pregnant during the Diagnostic Medical Sonography program?

The Program's Pregnancy Policy is:

A student may proceed through the program if she becomes pregnant. Any restrictions indicated by her physician must be provided in writing to the Program Director. After delivery, a release note must be provided from her physician, identifying any activity restriction or stating when the student is permitted to resume normal activity. If the restrictions (during the pregnancy or post-delivery) are determined to be too limiting for the student to meet the course requirements (outcomes), she may be counseled to withdraw from a SONO course. Additionally, if complications with the pregnancy/delivery occur and she is not able to fulfill the course requirements, the student will be counseled to withdraw. Any pregnant student, who withdraws from a SONO course due to her pregnancy, will be allowed to re-enter the following year in the SONO course from which she withdrew, subject to the re-entry policy.

The student must make up all clinical time missed, complete all course requirements and clinical competencies not completed as a consequence of the pregnancy in order to complete a SONO course.

Will I be able to find a job when I graduate?

The graduates of the LCCC Diagnostic Medical Sonography program are often hired shortly before or after graduating. While a majority of graduates find employment in the Cleveland and Lorain-Elyria areas, many graduates are working throughout various parts of the country.

The U.S. Bureau of Labor has stated that imaging professionals are in great demand and the need is increasing as medical imaging has seen a large increase of examination volume, due to an aging population and preventative care. Employment of diagnostic medical sonographers is

expected to grow faster than the average for all occupations through 2018 as the population grows and ages, increasing the demand for diagnostic imaging and therapeutic technology.

Hospitals are the principal employers of diagnostic medical sonographers. Additional job opportunities are occurring in physician offices, clinics and diagnostic imaging centers. These health-care facilities are expected to grow. This is due to the shift toward outpatient care made possible by technological advances that permit more procedures to be performed outside the hospital.

What is the salary range for a diagnostic medical sonographer According to the Society of Diagnostic Medical Sonography (SDMS) (www.sdms.org) survey of hospitals and medical centers across the United States, sonographers earn between \$50,000 and \$65,000 per year. Salary depends upon location and employer as well as the number of registry certifications attained.

According the U.S. Department of Labor (<http://www.bls.gov>), median annual earnings of diagnostic medical sonographers were \$61,980 in 2008. Salaries ranged from \$43,600 to \$83,950.

Median annual earnings of diagnostic medical sonographers in 2008 were \$61,870 in hospitals and \$62,340 in physician offices and clinics.

What should I do if I am not selected for the program?

Your application will expire if you are not selected for admission to the program by the first day of the Spring semester. You may, however, renew your application and retain your original application date if you submit an Application Renewal form. The Application Renewal form must be submitted within 60 calendar days of your application expiration date. Applications for the Diagnostic Medical Sonography program may be renewed more than once.

Some options to consider while waiting to enter the sonography program:

- 1) Check out LCCC's University Partnership. Youngstown State University's Bachelor Degree of Science in Applied Science in Allied Health or Ohio University's Bachelor of Technical and Applied Studies. Students completing an Allied Health Associate of Applied Science degree program can enter the YSU or OU programs at junior status. YSU and OU have many required support courses of which most can be taken at LCCC and transferred. When you finish the Diagnostic Medical Sonography program, you will be even closer to a Bachelor Degree.
- 2) Complete the LCCC phlebotomy program. The phlebotomy program is a one-year certificate program (that is only two-semester). Entering a certificate program will not nullify your application to the Diagnostic Medical Sonography program. (If you are accepted to and begin another associate degree allied health program at LCCC your name will be removed from the Diagnostic Medical Sonography Admission pool.) Phlebotomy skills will be useful as the FDA approves contrast materials for use. Diagnostic Medical Sonographers will be required to inject contrast materials in performing emerging function test with sonography. These materials have been used in Europe and Canada for several years.
- 3) Complete the LCCC Nurse Aide Training program. This is also a certificate program and thus will not void your sonography application. Upon completion of the Nurse Aide Training program, you could take the state licensing exam and work as a State Testes Nurse Aide (STNA) until entering the sonography program. This would give you valuable patient care skills as well as allowing you to work while waiting to enter the Diagnostic Medical Sonography program.
- 4) Work in your current job and save as much money as possible for a nest egg once you begin the Diagnostic Medical Sonography program.