

Diagnostic Medical Sonography

Associate in Applied Science

Available: Shoals Campus

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PROGRAM GOALS

Diagnostic Medical Sonography Program Goals:

"To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the abdominal sonography-extended and obstetrics and gynecology sonography concentrations."

GENERAL INFORMATION

The Division of Health Studies offers a four-semester Associate Degree Diagnostic Medical Sonography (DMS) program. Upon satisfactory completion, the Associate of Applied Science Degree is awarded. The Diagnostic Medical Sonography program prepares individuals, under the supervision of physicians, to utilize medical ultrasound techniques to gather sonographic data used to diagnose a variety of conditions and diseases. The student will receive training in acoustic principles, instrumentation and safety, abdominal, obstetrical, gynecologic, and superficial sonography.

The Associate Degree Diagnostic Medical Sonography Program supports the Philosophy and Purpose of the College and serves its community by preparing associate degree sonographers for a beginning level of practice in varied health settings.

Purpose and Goal: To prepare competent entry-level general sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

NOTICE: The curriculum is continuing to be reviewed and analyzed. Modifications will be made as needed. The most updated information will be found in the College catalog posted on the NWSCC website.

ADMISSION

1. Complete and submit college admissions application to the Admissions Office and receive a NWSCC student number prior to application deadline.
2. Complete and submit application for the Program (separate from college application) to the Assistant to Health Studies Office in Building 122, Room 162, with unofficial transcripts from all colleges attended attached. The deadline is April 15th.
3. Have an unconditional admission to the college.
4. Be in good standing with the college.
5. Submit official high school transcripts showing graduation OR official GED report to the Admissions Office. A final transcript with proof of graduation must be received by June 1st.

6. Submit official transcripts from ALL other colleges attended to the Admissions Office prior to application deadline. If you are attending another college, the final official transcript must be received by the Admissions Office by June 1st.
7. Must have a minimum 2.50 cumulative grade point average on a 4.0 scale based on the required academic core courses for Diagnostic Medical Sonography, and
 - a. Current or previous NWSCC students must have a minimum 2.0 GPA or higher at NWSCC.
 - b. Transfer students must enter NWSCC on clear academic status (cumulative 2.0 GPA)
8. Have a minimum of 18 ACT composite score National or Residual. The writing component is not required. The official results must be sent to the NWSCC Admissions Office. An unofficial copy of the ACT scores must be attached to the Diagnostic Medical Sonography application. There is no expiration date on the ACT score for the Diagnostic Medical Sonography application. The ACT must be taken by the application deadline. This program does not accept the ACT superscore.
9. Have completed BIO201, ENG101, MTH100 or higher, PHY115, PSY200 or PSY210, and a Humanities Elective with a grade of C or higher. (Classes must be completed with official documentation before the deadline of June 1st.)
10. Meet the eligibility criteria required for Diagnostic Medical Sonography.

The College reserves the right to adjust requirements or use additional criteria to determine admission.

Admission to the Associate of Applied Science in Diagnostic Medical Sonography Degree is competitive; the number of students is limited by the number of faculty and clinical facilities available. Meeting minimum admission criteria does not guarantee admission into the Program. After meeting all minimum criteria, applicants are ranked using a point system. The Associate Degree Diagnostic Medical Sonography Program is developed as a combined sequence of sonography coursework. General education coursework must be completed with a minimum grade of "C" or higher prior to the start of sonography coursework. The general education courses are offered on both the Shoals and Phil Campbell campuses at NWSCC. Completion of certain courses prior to application results in a higher ranking score and improves the chances of being admitted.

NOTICE: Your ability to comply with the Eligibility Criteria listed may be evaluated by health studies faculty at anytime that your ability to do so is in question.

ELIGIBILITY CRITERIA

The Alabama Community College System (ACCS) endorses the Americans' with Disabilities Act (ADA). In accordance with College policy, when requested, reasonable accommodations may be provided for individuals with disabilities. Physical, cognitive, psychomotor, affective and social abilities are required in unique combinations to provide safe and effective care. The applicant/student must be able to meet the eligibility criteria with or without reasonable accommodations throughout the program of learning. Admission, progression and graduation are contingent upon one's ability to demonstrate the eligibility criteria delineated for the program with or without reasonable accommodations. The program and/or affiliated clinical agencies may identify additional eligibility criteria. The program reserves the right to amend the eligibility criteria as deemed necessary. In order to be admitted and to progress in the program one must possess a functional level of ability to perform the duties required of the healthcare personnel for which the program is preparing the student. Admission or progression may be denied if a student is unable to demonstrate the eligibility criteria with or without reasonable accommodations. The eligibility criteria delineated are those deemed necessary the ACCS health studies programs. No representation regarding industrial standards is implied. Similarly, any reasonable accommodations made will be determined and applied to the respective program and may vary from reasonable accommodations made by healthcare employers. The eligibility criteria delineated below are necessary for program admission, progression and graduation and for the provision of safe and effective care. The eligibility criteria include, but are not limited to, the ability to:

1. Sensory Perception
 1. Visual

1. Observe and discern subtle changes in physical conditions and the environment
2. Visualize different color spectrums and color changes
3. Read fine print in varying levels of light
4. Read for prolonged periods of time
5. Read cursive writing
6. Read at varying distances
7. Read data/information displayed on monitors/equipment
2. Auditory
 1. Interpret monitoring devices
 2. Distinguish muffled sounds heard through a stethoscope
 3. Hear and discriminate high and low frequency sounds produced by the body and the environment
 4. Effectively hear to communicate with others
3. Tactile
 1. Discern tremors, vibrations, pulses, textures, temperature, shapes, size, location and other physical characteristics
4. Olfactory
 1. Detect body odors and odors in the environment
2. Communication/ Interpersonal Relationships
 1. Verbally and in writing, engage in a two-way communication and interact effectively with others, from a variety of social, emotional, cultural and intellectual backgrounds
 2. Work effectively in groups
 3. Work effectively independently
 4. Discern and interpret nonverbal communication
 5. Express one's ideas and feelings clearly
 6. Communicate with others accurately in a timely manner
 7. Obtain communications from a computer
3. Cognitive/Critical Thinking
 1. Effectively read, write and comprehend the English language
 2. Consistently and dependably engage in the process of critical thinking in order to formulate and implement safe and ethical decisions in a variety of health care settings
 3. Demonstrate satisfactory performance on written examinations including mathematical computations without a calculator
 4. Satisfactorily achieve the program objectives
4. Motor Function
 1. Handle small delicate equipment/objects without extraneous movement, contamination or destruction
 2. Move, position, turn, transfer, assist with lifting or lift and carry clients without injury to clients, self or others
 3. Maintain balance from any position
 4. Stand on both legs
 5. Coordinate hand/eye movements
 6. Push/pull heavy objects without injury to client, self or others
 7. Stand, bend, walk and/or sit for 6-12 hours in a clinical setting performing physical activities requiring energy without jeopardizing the safety of the client, self or others
 8. Walk without a cane, walker or crutches
 9. Function with hands free for care and transporting items
 10. Transport self and client without the use of electrical devices
 11. Flex, abduct and rotate all joints freely
 12. Respond rapidly to emergency situations
 13. Maneuver in small areas
 14. Perform daily care functions for the client
 15. Coordinate fine and gross motor hand movements to provide safe effective care
 16. Calibrate/use equipment
 17. Execute movement required to provide care in all health care settings
 18. Perform CPR and physical assessment
 19. Operate a computer
5. Professional Behavior
 1. Convey caring, respect, sensitivity, tact, compassion, empathy, tolerance and a healthy attitude toward others

2. Demonstrate a mentally healthy attitude that is age appropriate in relationship to the client
3. Handle multiple tasks concurrently
4. Perform safe, effective care for clients in a caring context
5. Understand and follow the policies and procedures of the College and clinical agencies
6. Understand the consequences of violating the student code of conduct
7. Understand that posing a direct threat to others is unacceptable and subjects one to discipline
8. Meet qualifications for licensure/certification by examination as stipulated by the respective program
9. Not to pose a threat to self or others
10. Function effectively in situations of uncertainty and stress inherent in providing care
11. Adapt to changing environments and situations
12. Remain free of chemical dependency
13. Report promptly to clinicals and remain for 6-12 hours on the clinical unit
14. Provide care in an appropriate time frame
15. Accept responsibility, accountability, and ownership of one's actions
16. Seek supervision/consultation in a timely manner
17. Examine and modify one's own behavior when it interferes with care or learning

Upon admission, an individual who discloses a disability can request reasonable accommodations. Individuals will be asked to provide documentation of the disability in order to assist with the provision of appropriate reasonable accommodations. The respective College will provide reasonable accommodations but is not required to substantially alter the requirements or nature of the program or provide accommodations that inflict an undue burden on the respective College. In order to be admitted, one must be able to perform all of the eligibility criteria with or without reasonable accommodations. If an individual's health changes during the program of learning, so that the eligibility criteria cannot be met with or without reasonable accommodations, the student will be withdrawn from the program. The faculty reserves the right at any time to require an additional medical examination at the student's expense in order to assist with the evaluation of the student's ability to perform the eligibility criteria.

TRANSFER POLICY

The transfer policy applies only to students desiring to transfer between Alabama Community College System institutions. It does not apply to students wishing to transfer from other institutions.

Criteria for transfer:

1. Must meet minimum admission standards for the Diagnostic Medical Sonography program.
2. Must possess a grade of C or better in all Diagnostic Medical Sonography required courses taken at another institution and possess a minimum of a 2.0 cumulative GPA at the time of transfer.
3. Dean/Chairperson/Director of previous Diagnostic Medical Sonography program must provide a letter of eligibility for progression in previous Diagnostic Medical Sonography program.
4. Must comply with all program policies and requirements at NWSCC (including, but not limited to the program, progression policy, Diagnostic Medical Sonography progression policy, and reinstatement policy).
5. Complete at least 25% of the Diagnostic Medical Sonography program required courses for degree at NWSCC.
6. Must meet acceptability criteria for placement at all clinical agencies for clinical experiences.
7. Acceptance of transfer students into the Diagnostic Medical Sonography program is limited by the number of faculty and clinical facilities available. Meeting minimal standards does not guarantee acceptance.
8. ACCS Diagnostic Medical Sonography Curriculum courses will be transferred without review of the course syllabus.
9. Submit an application requesting transfer to the Diagnostic Medical Sonography Program by the deadline published by the program.

PROGRAM REQUIREMENTS

After acceptance each student must:

1. Submit completed medical examination forms (at student expense) that provide evidence that the student is free of communicable disease and chemical dependency, and is physically and psychologically able to participate fully in both classroom and clinical aspects of the program. The Health Studies Faculty reserves the right to require at any time (at student expense) an additional medical examination in order to evaluate the student's state of physical, mental, and/or emotional health such as during pregnancy, infectious diseases, interference with mobility, emotional stability, chemical dependence, etc. When an examination or treatment is required, written proof must be provided by the physician attesting to the student's ability to carry out both classroom and clinical requirements of the program.

NOTE: Northwest Shoals Community College reserves the right to remove from the program any student who is refused use of facilities by any clinical agency.

2. Meet the Eligibility Criteria with or without reasonable accommodations. This criteria relates to the physical, mental, and emotional capabilities of the prospective students and are available in writing from the Health Studies Division or individual programs. Additional health criteria may be required by clinical agencies.
3. Purchase regulation uniforms and specified accessories.
4. Participate in, successfully complete, and pay for course card in cardiopulmonary resuscitation at the health care provider level (BLS) by the American Heart Association through the NWSCC Health Studies Division during the first semester of the program.
5. Receive certain immunizations/vaccinations at the student's expense.
6. Purchase professional liability insurance through the College (attached fee).
7. Participate in and pay for periodic standardized tests (if applicable).
8. Participate in and pay for substance abuse testing as directed by the Health Studies Division.
9. Participate in and pay for background checks as directed by the Health Studies Division. It is recommended that each student carry health insurance.

PROGRAM PROGRESSION POLICY:

In order to continue in the diagnostic medical sonography program, the student must:

1. Complete all required coursework from each previous semester with a grade of C or higher.
2. Maintain a 2.0 cumulative GPA at NWSCC.

Please note: The Grading Scale for all Diagnostic Medical Sonography Courses is:

A = 90 – 100
B = 80 – 89
C = 75 – 79
D = 60 – 74
F = 59 and below

3. Be accepted by all clinical agencies for clinical experiences. If a student is dismissed from any clinical agency, the student will be dismissed from the program. Depending on the issue, the student may be withdrawn or receive a failing clinical grade.
4. Earn a satisfactory clinical evaluation in all diagnostic medical sonography courses with a clinical component.

5. Maintain ability to meet eligibility criteria for the program with or without reasonable accommodations.
6. Maintain current CPR at the health care provider level by American Heart Association.
7. Maintain an adequate level of health, including but not limited to, annual physical examination, annual PPD, vaccinations, and freedom from chemical dependency and/or mental disorder.

A student that has an unsuccessful attempt in a sonography course (W, I, D, or F) cannot progress in the diagnostic medical sonography sequence until the course is completed successfully. Course repetition will be based on instructor availability and program resources.

DIAGNOSTIC MEDICAL SONOGRAPHY PROGRESSION POLICY

In order to progress in the diagnostic medical sonography program, the following policy should be followed:

1. A total of two unsuccessful attempts in two separate semesters (D, F, or W) in the diagnostic medical sonography program will result in dismissal from the program.
2. A student may be reinstated to the diagnostic medical sonography program only one time. The reinstatement is not guaranteed due to limitations in clinical spaces. All diagnostic medical sonography admission standards must be met.
3. A student must have a 2.0 cumulative GPA at the current institution for reinstatement.
4. If a student has a documented extenuating circumstance that should be considered related to a withdrawal or failure, then the student may request a hearing before the Admission Committee or other appropriate college committee for a decision on repeating a course or readmission to the program.

REINSTATEMENT POLICY:

Definition of reinstatement: Students who have a withdrawal or failure in a diagnostic medical sonography course and are eligible to return to that course will be considered for reinstatement to the program.

1. Students who desire to be reinstated following non-progression must schedule an appointment with a diagnostic medical sonography faculty advisor to discuss reinstatement.
2. A student must request reinstatement within one year from the term of non-progression to be eligible for reinstatement.
3. In order to be eligible for reinstatement, the student must,
 - a) Apply for readmission to the College if not currently enrolled;
 - b) Receive unconditional admission status from the College;
 - c) Demonstrate a 2.0 GPA in the Diagnostic Medical Sonography Program;
 - d) Have no more than one non-progression since program admission;
 - e) Submit application requesting reinstatement to the program by the deadline
 - f) Demonstrate the ability to meet eligibility criteria for the diagnostic medical sonography program with or without reasonable accommodations;
 - g) Demonstrate competency in previous diagnostic medical sonography courses by those students who have been out of progression for greater than one semester (This may be evaluated by testing and/or skills validation);
 - h) Be accepted by all clinical agencies for clinical experiences;
 - i) Demonstrate current American Heart Association CPR completion at the Health Care Provider level;

4. Students dismissed from the NWSCC Diagnostic Medical Sonography program for disciplinary reasons and/or unsafe patient care in the clinical area will not be allowed reinstatement to the program. The student may reapply as a new student into the NWSCC Diagnostic Medical Sonography program after the period of two years have lapsed unless the unsafe action resulted in actual harm or injury to self or others. In such cases, and in cases of dismissal due to criminal background or substance abuse, students may not reapply nor reinstate to any NWSCC Health Studies Program.

5. Reinstatement to the Diagnostic Medical Sonography program is not guaranteed and will only be allowed one time;

6. Reinstatement will be denied due to, but not limited to, any of the following circumstances:

- a) Grade point average is less than 2.0 from courses completed at the current institution;
- b) Refusal by any clinical agency to accept the student for clinical experiences;
- c) Classroom, laboratory, or clinical space unavailability;
- d) more than twelve months have lapsed since the student has enrolled in a diagnostic medical sonography course;
- e) being previously dismissed from the program for disciplinary reasons and/or unsafe client care in the clinical area.

A total of two unsuccessful attempts (D, F, or Withdrawal) in diagnostic medical sonography courses will result in dismissal from the program. Withdrawal and/or a D or F in one or more courses in a term will be considered one attempt.

READMISSION POLICY

Students who are ineligible for reinstatement due to two unsuccessful attempts in any diagnostic medical sonography program of the Alabama Community College System, may apply for readmission as a new student to the program provided:

- a) the student meets current entry requirements, and
- b) the student was not dismissed from the previous program for disciplinary reasons or for unsafe/unsatisfactory patient care in the clinical area that resulted in actual harm or injury to self or others;
- c) the student is accepted by all clinical agencies for clinical experiences.

STANDARDS OF CONDUCT:

The Diagnostic Medical Sonography student shall comply with the standards that determine acceptable behavior of a diagnostic medical sonographer. **FAILURE TO COMPLY WITH ANY OF THESE STANDARDS WHILE IN ANY HEALTH STUDIES PROGRAM CONSTITUTES GROUNDS FOR DISMISSAL FROM THE PROGRAM.**

The following examples of behavior may be grounds for dismissal from a Health Studies Program or for certification/ licensure application. Any individual who:

1. Is guilty of fraud or deceit in procuring or attempting to procure a license.
2. Is guilty of a crime involving moral turpitude or of gross immorality that would tend to bring reproach upon the profession.
3. Is unfit or incompetent due to the use of alcohol, or is addicted to the use of habit-forming drugs to such an extent as to render the licensee unsafe or unreliable.
4. Is mentally incompetent.
5. Is guilty of unprofessional conduct of a character likely to deceive, defraud, or injure the public in matters pertaining to health.

6. Has willfully or repeatedly violated any of the provisions for standards of conduct related to the profession.
7. Has been convicted of a felony.
8. Has been convicted of any violation of a Federal or State law relating to controlled substances.
9. Has any other reasons authorized by law.
10. Has been placed on a State and/or Federal abuse registry.
11. Has been court martialled or disciplined or administratively discharged by the military.

Students who have demonstrated any of the behaviors prior to or during attendance of the program may have to provide appropriate explanatory documentation with the certification/ licensing agency board. Any concerns related to the above should be discussed with a program advisor.

ANTICIPATED EXPENSES:

As a student in the program, you can anticipate certain necessary expenses. First of all, the tuition rate is the same as that for other NWSCC students, but Diagnostic Medical Sonography Program students will incur other expenses, which are listed below. Note that the amounts listed are approximations and are subject to change. The list may not include all items, but any additional would be disclosed to students upon admission to the program.

Books and online resources: \$1,600.00
Physical Exam, TB Tests & Immunizations: \$1,000.00
Uniforms and Small Equipment: \$345.00
Clinical Kit / Tracking: \$150.00
Clinical ID Badges: \$20.00
Drug Screening: \$80.00
Liability Insurance: \$40.00
Background Checks: \$75.00

NOTICE: In addition to the expenses listed, you are responsible for transportation, meals, health care expenses, any liability incurred during and while traveling to and/or from educational experiences.

The Associate in Applied Science Degree in Diagnostic Medical Sonography is a four-semester program beginning upon admission into the Diagnostic Medical Sonography program, which prepares the graduate to sit for certification. Pre-requisite courses must be completed prior to admission to the program.

Program: [Diagnostic Medical Sonography](#)

Entrance Requirements

- Submit a completed application;
- High School diploma or equivalent required:
- Age Requirement:
- Submit official high school/high school equivalent transcripts, if applicable;
- Submit official college transcripts, if applicable;
- Satisfy Placement Testing requirements.

Pre-Requisites

Item #	Title	Credits
ENG 101	English Composition I	3
	MTH 100 or higher	3
BIO 201	Human Anatomy and Physiology I	4
PHY 115	Technical Physics	4
	PSY 200 or PSY 210	3
	DMS Humanities Elective	3

Semester I (Fall)

Item #	Title	Credits
DMS 202	Foundations of Sonography	3
DMS 204	Sectional Anatomy	2
DMS 205	Abdominal Sonography	4
DMS 216	Sonographic Principles & Instrumentation I	3
DMS 229	Sonography Preceptorship	2

Semester II (Spring)

Item #	Title	Credits
DMS 206	Gynecologic Sonography	4
DMS 207	Abdominal Pathology	3
DMS 217	Sonographic Principles & Instrumentation II	2
DMS 220	Obstetrical Sonography I	3
DMS 230	Sonography Preceptorship II	3

Semester III (Summer)

Item #	Title	Credits
DMS 221	Obstetrical Sonography II	3
DMS 225	Superficial Sonography	1
DMS 231	Sonography Preceptorship III	4
DMS 240	Sonography Principles & Instrumentation Seminar	2

Semester IV (Fall)

Item #	Title	Credits
DMS 232	Sonography Preceptorship IV	5
DMS 241	Abdominal and Ob/Gyn Sonography Seminar	3
DMS 245	Sonography Case Presentation	1
DMS 250	Introduction to Advanced Sonography	3
	Minimum Credit Hours for Graduation:	71