DIAGNOSTIC MEDICAL SONOGRAPHY, CAREER ASSOCIATE OF SCIENCE

Associate of Science Career-Degree Programs

The Career Associate of Science degree in Diagnostic Medical Sonography at Albany State University is a general concentration program. The sequence of courses are designed to prepare students as entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. The program will prepare students to obtain positions in ultrasound departments and related businesses and facilities as well as provide guidance in pursuing educational opportunities that maximize professional potential. The program will prepare students for the certification examinations, appropriate for a general concentration program, offered by the American Registry for Diagnostic Medical Sonography (ARDMS).

Accreditation

Date of Initial Accreditation: March, 2017

Accreditation Cycle: March, 2017 – March, 2022

The Diagnostic Medical Sonography program in the Darton College of Health Professions at Albany State University is accredited by the:

Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS)

6021 University Boulevard, Suite 500
Ellicott City, MD 21043

Telephone: (443) 973-3251
Website: http://jrcdms.org/index.htm

The JRC-DMS sets forth standards to guide the program towards high levels of quality education and patient safety. The JRC-DMS and the Commission on Accreditation of Allied Health Education Programs’ (CAAHEP) Board of Directors recognizes the program's substantial compliance with the nationally established accreditation standards.

Legal Limitations

Individuals who have a criminal record may not be eligible for licensure. Therefore, it is recommended that he or she contact the American Registry for Diagnostic Medical Sonography (ARDMS) to verify eligibility for licensure. All students will be required to complete a national criminal background check prior to placement in clinical practicums. Clinical facilities also require a drug screen prior to placement. The clinical affiliate determines whether a student can participate in the clinical rotation based upon the results of the background check and drug screen. Should the student be denied clinical placement, he or she cannot progress through the program and will be dismissed. Careful consideration of any questionable record should be carefully scrutinized prior to application, as eligibility for licensure is at the discretion of the ARDMS.

ARDMS website: www.ardms.org (http://www.ardms.org)

Clinical Obligations and Acceptance

If accepted, students will have a clinical component of the program to complete. Clinical placement is equally distributed among students. Although the majority of the clinical component is carried out during day time hours, less than 25% of the total clinical assignments will be during evening and/or weekend hours. Program clinical locations are mainly located outside the city limits, and all expenses associated with travel are the student’s responsibility. Additionally, clinical affiliates require drug screens (initial and random), criminal background checks, periodic tuberculosis skin tests and specific vaccinations. If the student is placed in a facility requiring any/all of these items, the cost will be the student’s responsibility. Documentation of all immunizations and vaccinations will be collected prior to the start of clinical observations. Failure to provide this documentation will prevent the student from being allowed to attend clinical settings. These absences will be unexcused and may lead to the student’s dismissal from the program.

Re-admission of Returning Students

If a final grade of lower than a “C” (below 75%) is made in any DMSP courses, the student will be dismissed from the program, however, the student may apply for re-admission to the program in the fall and re-enter the program beginning with the first course offered (DMSP 1100), if the space is available. Availability is based on the number of clinical sites.

If the student makes a final grade of lower than a “C” in the same DMSP course or another DMSP course after re-entering the program, the student will then be permanently dismissed from the program, without the option for re-admission.

Application Deadline

Completed application forms must be RECEIVED NO LATER THAN JUNE 1, of each year. The application is completed only when all the information requested is received. Students are responsible for making sure their application is complete.

Procedures and Requirements for Admission into the DMS Program

To be considered for admission into the Diagnostic Medical Sonography (DMS) program, the applicant must:

1. Be admitted to Albany State University
   - You may apply on-line at https://www.asurams.edu/admissions/how-to-apply/
   - Please do not send the ASU application or $20 fee to the DMS Program. The two application processes are separate, no additional fee is required when submitting the DMS Program application.

2. Submit the completed DMS application by the June 1 deadline
   The student must complete a Diagnostic Medical Sonography application by the June 1 deadline for fall admission. It is the responsibility of the applicant to ensure all application material has been completed by utilizing the checklist at the end of the application.
   - Must include an Observational Hours Form verifying a minimum of 30 observational hours in a Diagnostic Medical Sonography setting (located in application packet).
• Must include at least one Recommendation Form (located in application packet).
• Must include copies of all transcripts from previous colleges/universities or technical schools.
• Must include documentation of previous work experience in an allied health field and any previous certificates or degrees (if applicable).

3. **Must ensure the applicant meets the following minimum requirements**

   a. Must complete a minimum of 30 observational hours of experience in one or more Diagnostic Medical Sonography settings. This **excludes** 3D/4D ultrasound facilities.
      • The hours must be documented and verified/signed by the Sonographer observing.
      • An Observational Hours Form is located within the application packet.
   b. At least one recommendation form must be completed by the Sonographer observing. The required Recommendation Form is located within the application packet and may be photocopied for additional recommendations.
   c. A minimum cumulative grade point average (GPA) (all previous coursework attempted) of 2.5 is required. Pre-requisite courses must be completed prior to the start of the program with a grade of “C” or better.

**Please send Application & Document Submission to:**

Health Sciences Division – ASU West Campus
Diagnostic Medical Sonography Program
Attention: Application Coordinator
2400 Gillionville Rd.
Albany, GA 31707-3098

DMS Program Telephone: 229-500-2235.
Health Sciences office is located in building J, Office 210
Health Sciences Telephone: 229-500-2239

**Selection Process**

After the June 1 deadline, the DMS Selection Committee reviews and scores each application. Applications will be processed and all applicants will be contacted via email no later than July 15. The top 20 applicants will be sent an invitation via email for a personal interview. Scoring is based on the following criteria:

- prerequisite course completion,
- prerequisite and cumulative GPA,
- the number of hours observed in one or more diagnostic medical sonography settings,
- previous health care experience or a degree/certificate in an allied health field,
- the personal interview, and
- appropriate recommendations received.

After completion of interviews, the top 14 applicants will be selected. Correspondence of acceptance or regret will be made through email and should be received no later than July 12. Selected students must confirm their intent to enroll in writing (via e-mail) within 10 days of their acceptance e-mail. A student that fails to respond in the appropriate time will forfeit their position. The Darton College of Health Professions DMS program does not utilize a waiting list and those denied acceptance must reapply the following year.

**Consideration and additional points may be given to those students whom have:**

1. Provided documentation of a degree in a Health Science Field, Science or Biology.
2. Provided documentation of a certificate in a health care area that is directly related to patient care.
3. Provided documentation of work experience in a health care environment that is directly related to patient care. Documentation of work experience:
   A. Must be on company letter head and signed by immediate supervisor.
   B. A minimum of 6 months’ work experience.
   C. Provide a description of job duties that demonstrate hands on patient experience.

4. Completed all DMS pre-requisite and core course work.

**Recommended Courses for Career Associate of Science Degree Programs**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1100K</td>
<td>Human Anatomy and Physiology for the Health Care Professional or BIOL 2411K &amp; BIOL 2412K and Human Anatomy and Physiology II</td>
<td></td>
</tr>
<tr>
<td>MATH 1111</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 1011K</td>
<td>Physical Science I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1100K</td>
<td>Human Anatomy and Physiology II</td>
<td>3</td>
</tr>
</tbody>
</table>

**DMS General Education Courses (may be completed prior to start of program OR during)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2411</td>
<td>Introduction to Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1101</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>BUSA 2101</td>
<td>Survey of Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1101</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>ALHE 1120</td>
<td>Medical Terminology</td>
<td>2</td>
</tr>
</tbody>
</table>

Humanities requirement may be met by taking any Area C: Humanities/Fine Arts courses listed on the Core Curriculum page (see link in footnote) 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMS Program Coursework</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMSP 1100</td>
<td>Physics of Ultrasound</td>
<td>3</td>
</tr>
<tr>
<td>DMSP 1101</td>
<td>Introduction to Diagnostic Medical Sonography</td>
<td>2</td>
</tr>
<tr>
<td>DMSP 1102</td>
<td>Abdomen Ultrasound I</td>
<td>3</td>
</tr>
<tr>
<td>DMSP 1105</td>
<td>Clinical Observations</td>
<td>2</td>
</tr>
<tr>
<td>DMSP 1106</td>
<td>Obstetrics and Gynecological Ultrasound I</td>
<td>3</td>
</tr>
<tr>
<td>DMSP 1107</td>
<td>Physics of Ultrasound II</td>
<td>3</td>
</tr>
<tr>
<td>DMSP 2111</td>
<td>Abdomen Ultrasound II</td>
<td>3</td>
</tr>
<tr>
<td>DMSP 2112</td>
<td>Obstetrics and Gynecological Ultrasound II</td>
<td>3</td>
</tr>
<tr>
<td>DMSP 2113</td>
<td>Clinical Observation and Practicum I</td>
<td>3</td>
</tr>
<tr>
<td>DMSP 2200</td>
<td>Superficial Structures and Pediatric Ultrasound</td>
<td>3</td>
</tr>
</tbody>
</table>
DMSP 2201. Clinical Observation and Practicum II. (3 Credits)

DMSP 2205. Physics in Review. (1 Credit)

DMSP 2202. Introduction to Vascular Ultrasound. (3 Credits)

DMSP 2203. Ultrasound in Review. (3 Credits)

DMSP 2204. Clinical Observations and Practicum III. (3 Credits)

Total Semester Hours

1 Humanities requirement may be met by taking any Area C: Humanities/Fine Arts courses listed on the Core Curriculum page (http://catalog.asurams.edu/undergraduate/core-curriculum/#healthtext).

Depending on your enrollment status, you may be required to take ASU 1101, "First Year Experience."

DMSP 1100. Physics of Ultrasound. (3 Credits)

This course defines the basics of ultrasound physics and introduces the student to their practical use in diagnostic ultrasound. Topics of discussion will include the definition of sound, propagation of sound in tissue, axial and lateral resolution, transducers, sound beams, display modes, and two-dimensional imaging. Prerequisites: Admission to the Diagnostic Medical Sonography program. Corequisite: DMSP 1100. Offered: Fall, first year. Credits: 3.00 Credit Hours (2.00 Lecture - 3.00 Lab).

DMSP 1101. Introduction to Diagnostic Medical Sonography. (2 Credits)

This course is designed to introduce the student to the basic principles of ultrasound. Professionalism, functions, and desirable attributes of a sonographer will be discussed along with patient care principles and techniques. The course presents the language of sonographers, educational opportunities for the occupation and introduces cross-sectional anatomy. Prerequisites: Admission into the Diagnostic Medical Sonography program. Corequisite: DMSP 1101. Offered: Fall, first year. Credits: 2.00 Credit Hours (1.00 Lecture - 3.00 Lab).

DMSP 1102. Abdomen Ultrasound I. (3 Credits)

This course is designed to introduce the ultrasound student to normal appearing abdominal anatomy, including organs, cavities, structures and vasculature. The sonographic appearance of normal anatomic structures, including anatomic variants and normal Doppler patterns will also be discussed. We will discuss emergent ultrasound procedures and interventional ultrasound procedures. The student develops the skills necessary to perform basic diagnostic ultrasound studies for presentation to the physician and/or radiologist for interpretation. Prerequisites: Completion of all previous semester's DMSP courses with a grade of 75 or higher. Corequisites: DMSP 1105, DMSP 1106, DMSP 1107. Offered: Spring, first year. Credits: 3.00 Credit Hours (2.00 Lecture - 3.00 Lab).

DMSP 1103. Obstetrical Ultrasound I. (3 Credits)

This course presents fetal development from conception through the third trimester. First to third trimester of normal fetal anatomy and sonographic appearance. Laboratory test pertaining to the fetus and mother. Ultrasound protocols for scanning the first to third trimester fetus. Fetal lie in the uterus as viewed by ultrasound as well as normal fetal environment. Prerequisite: Completion of all previous semesters of DMSP courses with a grade of "C" or better. Corequisites: DMSP 1102, DMSP 1104, DMSP 1105. Offered: Spring, first year.

DMSP 1104. Pelvic Ultrasound. (3 Credits)

This course will explore the normal sonographic measurements, appearance and cross sectional anatomy of the non-gravid female and male pelvis. The musculature and surrounding vessels will be discussed along with normal Doppler findings. It will include all the hormonal changes that effect the reproductive cycle as well as laboratory values associated with normal and abnormal female health. A comprehensive sonographic evaluation of abnormalities pertaining to all female and male pelvic anatomy will be investigated. Prerequisite: A grade of "C" or better in all previous semester's DMSP course work. Corequisites: DMSP 1102, DMSP 1103, DMSP 1105. Offered: Spring, first year.

DMSP 1105. Clinical Observations. (2 Credits)

This course is an initial introduction to the clinical environment. It allows the student to familiarize themselves with the operational process and exam protocols of the ultrasound department at their respective clinical affiliate. Prerequisites: Completion of all previous semester’s DMSP courses with a grade of 75 or higher. Corequisites: DMSP 1102, DMSP 1106, DMSP 1107. Offered: Spring, first year. Credits: 2.00 Credit Hours (0.00 Lecture - 16.00 Lab).

DMSP 1106. Obstetrics and Gynecological Ultrasound I. (3 Credits)

This course is designed to provide the student with an introduction to the accurate assessment and performance of obstetric and gynecologic ultrasound. Normal anatomy of the female pelvis and normal fetal development from conception through the third trimester will be discussed. Pathologic conditions of the female pelvis will be discussed along with hormonal changes that affect the reproductive cycle and laboratory values associated with normal and abnormal findings. Sonographic appearances and standard protocols of the female pelvis and normal fetus will be examined along with first trimester complications. Prerequisites: Completion of all previous semester’s DMSP courses with a grade of 75 or higher. Corequisites: DMSP 1102, DMSP 1105, DMSP 1107. Offered: Spring, first year. Credits: 3.00 Credit Hours (2.00 Lecture - 3.00 Lab).

DMSP 1107. Physics of Ultrasound II. (3 Credits)

This course is a continuation of DMSP 1100. We will continue to discuss ultrasound physics and its use in the clinical environment. Doppler principles, hemodynamics, ultrasound safety and bio-effects will be discussed along with pulsed echo instrumentation. Prerequisites: Completion of all previous semester’s DMSP courses with a grade of 75 or higher. Corequisites: DMSP 1102, DMSP 1105 and 1106. Offered: Spring, first year. Credits: 3.00 Credit Hours (3.00 Lecture - 0.00 Lab).

DMSP 2111. Abdomen Ultrasound II. (3 Credits)

This course is designed to introduce the ultrasound student to the abnormal sonographic and Doppler patterns of disease processes, pathology and pathophysiology of abdominal organs. Normal and abnormal lab values will also be discussed. Prerequisites: Completion of all previous semester's DMSP courses with a grade of 75 or higher. Corequisites: DMSP 2112, DMSP 2113. Offered: Summer. Credits: 3.00 Credit Hours (2.00 Lecture - 3.00 Lab).

DMSP 2112. Obstetrics and Gynecological Ultrasound II. (3 Credits)

This course presents fetal abnormalities from the first trimester through the third trimester as well as the role of sonographers in performing interventional/invasive procedures. Multiple gestations, amniotic fluid index, congenital/genetic anomalies, viability, fetal monitoring, maternal factors, fetal therapy and the post-partum mother will also be discussed. Prerequisites: Completion of all previous semester's DMSP courses with a grade of 75 or higher. Corequisites: DMSP 2111, DMSP 2113. Offered: Summer. Credits: 3.00 Credit Hours (3.00 Lecture - 0.00 Lab).
DMSP 2113. Clinical Observation and Practicum I. (3 Credits)
This is an expansion of the clinical observations course, DMSP 1105. Students will begin their hands-on experience by entering patient data, recording patient history, selecting the appropriate transducer for the exam, positioning the patient for the exam and practicing the art of scanning. Prerequisites: Completion of all previous semester’s DMSP courses with a grade of 75 or higher. Corequisites: DMSP 2111, DMSP 2112. Offered: Summer. Credits: 3.00 Credit Hours (0.00 Lecture - 24.00 Lab).

DMSP 2116. Clinical Observation/Prac II. (2 Credits)
This is an expansion of DMSP 2113 with increasing responsibilities of the student sonographer. This course allows student observation and participation in the clinical setting with hands-on experience with patients and equipment. Prerequisite: DMSP 2113. Corequisites: DMSP 2114, DMSP 2115. Offered: Fall, second year.

DMSP 2117. Ultrasound in Review. (3 Credits)
This is a comprehensive review course for all previous DMSP courses to prepare the student for the ultrasound registry. It will also review any trouble areas a student may be experiencing. Prerequisite: Completion of all previous semester’s DMSP courses with a grade of “C” or better. Corequisites: DMSP 2118, DMSP 2120. Offered: Spring, second year.

DMSP 2118. Clin Observations/PracIII. (2 Credits)
An expansion of DMSP 2116; this course allows students to gain confidence in their skills and the knowledge gained throughout the DMS program. Prerequisites: DMSP 2116. Corequisites: DMSP 2112, DMSP 2117. Offered: Spring, second year.

DMSP 2120. Vascular Ultrasound. (3 Credits)
This course is designed to provide the student with a basic introduction to the assessment of flow regarding the vascular system using ultrasound. The student develops the skills necessary to perform basic diagnostic ultrasound studies for presentation to the physician. The student 1) will review the physics of Doppler ultrasounds; 2) becomes familiar with and is able to perform all abdominal Doppler exams, including transplant organs and intraoperative guidance; 3) becomes familiar with other exams such as peripheral vascular studies. Prerequisite: DMSP 2115. Corequisites: DMSP 2117, DMSP 2118. Offered: Spring, second year.

DMSP 2200. Superficial Structures and Pediatric Ultrasound. (3 Credits)
This course is designed to provide the student with an introduction to the assessment of superficial structures, neonatal brain, and pediatric ultrasound. The sonographic appearance of related pathology and their processes will be examined. Normal and abnormal lab values will be discussed as well as normal and abnormal Doppler signals of various organs. Prerequisites: Completion of all previous semester’s DMSP courses with a grade of 75 or higher. Corequisites: DMSP 2201, DMSP 2205. Offered: Fall, second year. Credits: 3.00 Credit Hours (2.00 Lecture - 3.00 Lab).

DMSP 2201. Clinical Observation and Practicum II. (3 Credits)
This is an expansion of DMSP 2113 with increasing responsibilities of the student sonographer. This course allows student observation and participation in the clinical setting with hands-on experience with patients and equipment. Prerequisites: Completion of all previous semester’s DMSP courses with a grade of 75 or higher. Corequisites: DMSP 2200, DMSP 2205. Offered: Fall, second year. Credits: 3.00 Credit Hours (0.00 Lecture - 24.00 Lab).

DMSP 2202. Introduction to Vascular Ultrasound. (3 Credits)
This course is designed to provide the student with a basic introduction to the assessment of the vascular system. The student develops the skills necessary to perform basic diagnostic ultrasound studies for presentation to the physician. The student will review the physics of Doppler ultrasound, become familiar with and perform all abdominal Doppler exams, including, but not limited to, transplant organs and intraoperative guidance, and become familiar with peripheral vascular studies. Prerequisites: Completion of all previous semester’s DMSP courses with a grade of 75 or higher. Corequisites: DMSP 2203, DMSP 2204. Offered: Spring, second year. Credits: 3.00 Credit Hours (2.00 Lecture - 3.00 Lab).

DMSP 2203. Ultrasound in Review. (3 Credits)
This is a comprehensive review course to prepare the student for taking the ultrasound examinations appropriate for the general learning concentration through the American Registry for Diagnostic Medical Sonography (ARDMS). The course will also prepare students and provide guidance for obtaining employment in the field of Diagnostic Medical Sonography. Prerequisite: Completion of all previous semester’s DMSP courses with a grade of 75 or higher. Corequisites: DMSP 2202, DMSP 2204. Offered: Spring, second year. Credits: 3.00 Credit Hours (3.00 Lecture - 0.00 Lab).

DMSP 2204. Clinical Observations and Practicum III. (3 Credits)
This is a comprehensive review course to prepare the student for taking the ultrasound examinations appropriate for the general learning concentration through the American Registry for Diagnostic Medical Sonography (ARDMS). The course will also prepare students and provide guidance for obtaining employment in the field of Diagnostic Medical Sonography. Prerequisites: Completion of all previous semester’s DMSP courses with a grade of 75 or higher. Corequisites: DMSP 2202, DMSP 2204. Offered: Spring, second year. Credits: 3.00 Credit Hours (3.00 Lecture - 0.00 Lab).

DMSP 2205. Physics in Review. (1 Credit)
This course is a comprehensive review course designed to prepare the student for the Sonographic Principles and Instrumentation (SPI) exam offered through the American Registry of Diagnostic Medical Sonographers (ARDMS). Prerequisites: Completion of all previous semester’s DMSP courses with a grade of 75 or higher. Corequisites: DMSP 2200, 2201. Offered: Fall, second year. Credits: 1.00 Credit Hours (1.00 Lecture - 0.00 Lab).