

DIAGNOSTIC MEDICAL SONOGRAPHY AAS

Total Credits: 63 - 70

Catalog Edition: 2024-2025

Program Description

This curriculum, accredited by the Commission on Accreditation of Allied Health Education Programs, requires a minimum of two years of didactic and clinical experience. It provides a foundation for graduates to become highly skilled in providing patient services using diagnostic ultrasound under the supervision of a physician in hospitals, offices, and other health care settings. Reflected ultrasound waves are utilized by the sonographer to display images on a video monitor of body tissues. The sonographer is responsible for performing the examinations, providing patient care, and recording anatomical, pathological, and/or physiological data for interpretation by the physician.

Admission requirements, including specific selection criteria, have been established by the Board of Trustees; see the Admissions and Registration section of this catalog.

Students need to meet prerequisites for first-semester courses. Each of the diagnostic medical sonography courses builds on materials offered in previous courses. Students in this curriculum are required to achieve a grade of C or better in each sonography course and maintain current CPR certification while enrolled in the program.

Upon completion of this curriculum, the graduate will receive an AAS and be eligible to apply to take the national registry exam, administered by the American Registry of Diagnostic Medical Sonographers, in one or more of the following specialties: abdominal sonography, breast sonography, obstetrics/gynecology sonography, adult echocardiography, pediatric echocardiography, or vascular sonography.

Program Outcomes

Upon completion of this program, a student will be able to:

- Obtain, review, and integrate pertinent patient history and supporting clinical data to facilitate optimum diagnostic results.

- Perform appropriate procedures and record anatomical, pathological, and/or physiological data for interpretation by a physician.
- Record, analyze, and process diagnostic data and other pertinent observations made during the procedure for presentation to the interpreting physician.
- Exercise discretion and judgment in the performance of sonographic and/or other diagnostic services.
- Demonstrate appropriate communication skills with patients and colleagues.
- Act in a professional and ethical manner.
- Provide patient education related to medical ultrasound and/or other diagnostic vascular techniques and promote principles of good health.

Program Advisors

Takoma Park/Silver Spring

- Prof. Linda Zanin, 240-567-5563,
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- Prof. Lee Shryock, 240-567-5563,
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Advising Worksheets

General Sonography Area of Concentration: <https://www.montgomerycollege.edu/documents/counseling-and-advising/advising-worksheets/current-catalog/530g.pdf>

Echocardiography Area of Concentration: <https://www.montgomerycollege.edu/documents/counseling-and-advising/advising-worksheets/current-catalog/530e.pdf>

Vascular Area of Concentration: <https://www.montgomerycollege.edu/documents/counseling-and-advising/advising-worksheets/current-catalog/530v.pdf>

2024-2025

Program Advising Guide

An Academic Reference Tool for Students

DIAGNOSTIC MEDICAL SONOGRAPHY AAS

Suggested Course Sequence

A suggested course sequence for full-time students follows. All students should review this advising guide and consult an advisor.

General Education Requirements

Foundation Courses

English foundation 3 semester hours (ENGF)
Mathematics foundation 3 semester hours (MATF)

Distribution Courses

BIOL 150 - Principles of Biology I 4 semester hours (NSLD)
COMM 108 - Foundations of Human Communication 3 semester hours (ARTD/HUMD)
PSYC 100 - General Psychology 3 semester hours (BSSD)

General Education Elective

BIOL 212 - Human Anatomy and Physiology I 4 semester hours (GEEL)

Other Requirements

BIOL 213 - Human Anatomy and Physiology II 4 semester hours (NSLD)
HINM 115 - Medical Terminology I 2 semester hours
HINM 116 - Medical Terminology II 2 semester hours
HINM 120 - Concepts of Disease 3 semester hours
PHYS 103 - Introduction to Physics 2 semester hours

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General Sonography Area of Concentration

First Semester – Summer I

SONO 101 - Orientation to Diagnostic Medical Sonography
3 semester hours

Second Semester – Fall I

SONO 105 - Acoustical Physics I 2 semester hours
SONO 204 - Introduction to Sectional Anatomy 3 semester
hours
SONO 261 - Sonography Practicum I 1 semester hour

Third Semester – Spring I

SONO 112 - Abdominal Sonography I 3 semester hours
SONO 123 - Obstetrics/Gynecology Sonography I 3
semester hours
SONO 205 - Acoustical Physics and Instrumentation II 2
semester
SONO 262 - Sonography Practicum II 1 semester hour

Fourth Semester – Summer II

SONO 263 - Sonography Practicum III 2 semester hours

Fifth Semester – Fall II

SONO 264 - Sonography Practicum IV 4 semester hours
SONO 232 - Abdominal Sonography II 3 semester hours
SONO 243 - Obstetric/Gynecology Sonography II 3
semester hours

Sixth Semester – Winter II

SONO 224 - Seminar-Diagnostic Medical Sonography 1
semester hour
SONO 265 - Sonography Practicum V 1 semester hour

Seventh Semester – Spring II

SONO 210 - Breast Sonography 1 semester hour
SONO 266 - Sonography Practicum VI 4 semester hours

Total Credit Hours for General Sonography Area of Concentration: 70

DIAGNOSTIC MEDICAL SONOGRAPHY AAS

Echocardiography Area of Concentration

First Semester – Summer I

SONO 101 - Orientation to Diagnostic Medical Sonography
3 semester hours

Second Semester – Fall I

SONO 105 - Acoustical Physics I 2 semester hours
SONO 204 - Introduction to Sectional Anatomy 3 semester
hours
SONO 261 - Sonography Practicum I 1 semester hour

Third Semester – Spring I

SONO 205 - Acoustical Physics and Instrumentation II 2
semester
SONO 245 - Adult Echocardiography I 3 semester hours
SONO 262 - Sonography Practicum II 1 semester hour

4th Semester – Summer II

SONO 263 - Sonography Practicum III 2 semester hours

Fifth Semester – Fall II

SONO 264 - Sonography Practicum IV 4 semester hours
SONO 229 - Pediatric Echocardiography 3 semester hours
SONO248 - Adult Echocardiography II 3 semester hours

Sixth Semester – Winter II

SONO 224 - Seminar-Diagnostic Medical Sonography 1
semester hour
SONO 265 - Sonography Practicum V 1 semester hour

Seventh Semester – Spring II

SONO 266 - Sonography Practicum VI 4 semester hours

Total Credit Hours for Echocardiography Area of Concentration: 66

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Vascular Area of Concentration

First Semester – Summer I

SONO 101 - Orientation to Diagnostic Medical Sonography
3 semester hours

Second Semester – Fall I

SONO 105 - Acoustical Physics I 2 semester hours
SONO 204 - Introduction to Sectional Anatomy 3 semester
hours
SONO 261 - Sonography Practicum I 1 semester hour

Third Semester – Spring I

SONO 205 - Acoustical Physics and Instrumentation II 2
semester
SONO 262 - Sonography Practicum II 1 semester hour
SONO 246 - Vascular Sonography I 3 semester hours

Fourth Semester – Summer II

SONO 263 - Sonography Practicum III 2 semester hours

Fifth Semester – Fall II

SONO 264 - Sonography Practicum IV 4 semester hours
SONO 256 - Vascular Sonography II 3 semester hours

Sixth Semester – Winter II

SONO 224 - Seminar-Diagnostic Medical Sonography 1
semester hour
SONO 265 - Sonography Practicum V 1 semester hour

Seventh Semester – Spring II

SONO 266 - Sonography Practicum VI 4 semester hours

Total Credit Hours for Vascular Area of Concentration: 63

Transfer Opportunities

Montgomery College has partnerships with multiple four-year institutions and the tools to help you transfer. To learn more, please visit <https://www.montgomerycollege.edu/transfer> or <http://artsys.usmd.edu>.

Get Involved at MC!

Employers and Transfer Institutions are looking for experience outside the classroom.

MC Student Clubs and Organizations: <https://www.montgomerycollege.edu/life-at-mc/student-life/>

Related Careers

Some require a Bachelor's degree.

Radiation Therapist, Medical and Clinical Laboratory Technician, Diagnostic Medical Sonographer, Radiologic Thechnologist.

Career Services

Montgomery College offers a range of services to students and alumni to support the career planning process. To learn more, please visit <https://www.montgomerycollege.edu/career>

Career Coach

A valuable online search tool that will give you the opportunity to explore hundreds of potential careers or job possibilities in Maryland and the Washington D.C. metropolitan area. Get started today on your road to a new future and give it a try. For more information, please visit <https://montgomerycollege.emsicc.com>

Notes:

Students who plan to major in diagnostic medical sonography will be assigned the temporary major of pre-diagnostic medical sonography, with POS code 530, until they are officially admitted to the diagnostic medical sonography program. Students may take preparatory courses and courses that fulfill General Education requirements during the waiting period. As an alternative to being assigned a temporary major, students waiting for admission to the diagnostic medical sonography program may choose to major in general studies or any other open-admission program. The Admissions and Records Office at Takoma Park/Silver Spring will assign a matriculated code once students are admitted to the diagnostic medical sonography program.