

Northern Virginia Community College 2009-2010 Catalog
Medical Education - Allied Health and Nursing Curricula

DIAGNOSTIC MEDICAL SONOGRAPHY:

Echocardiography Specialization

Associate of Applied Science Degree

MEC

Purpose: The curriculum prepares students to produce diagnostic images of the heart structures and motion to diagnose cardiovascular changes. The echocardiographer uses special equipment to direct high frequency sound waves into areas of the patient's body. The echocardiographer is a central member of the health care team and assists the radiologist in body image interpretation. Upon successful completion of degree requirements, the student will be eligible to apply to take the American Registry of Diagnostic Medical Sonography examinations leading to credentials as a Registered Diagnostic Cardiac Sonographer (RDCS®).

Admission Requirements:

Students must:

- Comply with all General Admission Requirements for Allied Health Programs.
- Attend a Diagnostic Medical Sonography Information Session.
- Complete BIO 141 Anatomy and Physiology I with a "B" or higher.
- Complete DMS 100 Orientation to the Sonography Profession with a "B" or higher.
- Complete ENG 111 College Composition I with a grade of "C" or higher.
- Complete MTH 151 Mathematics for the Liberal Arts I with a "C" or higher.
- Complete PHY 195 Topics in Ultrasound Acoustical Physics with a "B" or higher.
- Complete SDV 101 Orientation to Healthcare with a "C" or higher.

Prerequisites:

		Credits
BIO	141 Human Anatomy and Physiology I	4
DMS	100 Orientation to the Sonography Profession	1
ENG	111 College Composition I	3
MTH	151 Mathematics for Liberal Arts I	3
PHY	195 Topics in Ultrasound Acoustical Physics	2
SDV	101 Orientation to Healthcare	<u>1</u>
	Total	14

Two Years

1st Semester

		Credits
BIO	142 Human Anatomy and Physiology II	4
DMS	196 On-Site Training in Echocardiography	1
DMS	206 Introduction to Sonography	2
DMS	208 Ultrasound Physics and Instrumentation I	2
DMS	218 Ultrasound Physics and Instrumentation Lab I	1
DMS	240 Echocardiography Sectional Anatomy	<u>3</u>
	Total	13

2nd Semester

DMS	150 Echocardiography I	4
DMS	209 Ultrasound Physics and Instrumentation II	2
DMS	219 Ultrasound Physics and Instrumentation Lab II	1
DMS	231 Clinical Education I	3
DMS	256 Echocardiography Case Study Review	1
¹ PED	116 Lifetime Fitness and Wellness	<u>2</u>
	Total	13

3rd Semester

DMS	232 Clinical Education II	<u>4</u>
	Total	4

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**Echocardiography Specialization
Diagnostic Medical Sonography A.A.S.**

4th Semester

² CST	Elective	3
DMS	190 Coordinated Internship	5
DMS	250 Echocardiography II	<u>4</u>
	Total	12

5th Semester

DMS	255 Echocardiography Registry Review	2
DMS	290 Coordinated Internship	4
³ —	Humanities/Fine Arts Elective	3
⁴ —	Social Science Elective	<u>3</u>
	Total	12

**Total credits for the A.A.S. Degree in Diagnostic Medical Sonography
with a Specialization in Echocardiography = 68** (includes 14 prerequisite credits)

¹ The PED requirement may be met by one of the following options: PED 116, 2 cr.; PED 220, 2 cr.; PED 116, 1 cr. plus a PED activities course, 1 cr.; or PED 116, 1 cr. plus RPK activities course. PED 116 is offered as both a 1-credit and a 2-credit course.

² The CST elective may be selected from CST 229 Intercultural Communication, CST 110 Introduction to Communication, CST 115 Small Group Communication, or CST 126 Interpersonal Communication.

³ Humanities/fine arts elective may be selected from the humanities/fine arts courses listed under General Education Electives.

⁴ The social science elective may be selected from the social/behavioral sciences courses listed under General Education Electives.