

CURRICULUM STANDARD

Effective Term
Fall 1997
[1997*03]

Curriculum Program Title

Medical Sonography

Code

A45440

Concentration

(not applicable)

Curriculum Description

The Medical Sonography curriculum provides knowledge and clinical skills in the application of high frequency sound waves to image internal body structures.

Course work includes physics, cross-sectional anatomy, abdominal, introductory vascular, and obstetrical/gynecological sonography. Competencies are attained in identification of normal anatomy and pathological processes, use of equipment, fetal growth and development, integration of related imaging, and patient interaction skills.

Graduates of accredited programs may be eligible to take examinations in ultrasound physics and instrumentation and specialty examinations administered by the American Registry of Diagnostic Medical Sonographers and find employment in clinics, physicians' offices, mobile services, hospitals, and educational institutions.

Curriculum Requirements*

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204 (3)]

- I. General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.
- II. Major Hours.** AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*
- III. Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

	AAS	Diploma	Certificate
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1
Total Semester Hours Credit (SHC)	64-76	36-48	12-18

**Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.*

Major Hours

[ref. 23 NCAC 02E.0204 (3)]

- A. Core.** The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.
- B. Concentration** *(if applicable)*. A concentration of study must include a minimum of 12 semester hours credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.
- C. Other Major Hours.** Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

Medical Sonography A45440

	AAS	Diploma	Certificate																																		
Minimum Major Hours Required	49 SHC	30 SHC	12 SHC																																		
<p>A. CORE <i>A diploma offered under this AAS degree requires a minimum of 12 SHC extracted from the required subject/course core of the AAS degree.</i></p> <p>Required Courses:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">SON 110 Introduction to Sonography</td><td style="width: 20%; text-align: right;">3 SHC</td></tr> <tr><td>SON 111 Sonographic Physics</td><td style="text-align: right;">4 SHC</td></tr> <tr><td>SON 120 SON Clinical Education I</td><td style="text-align: right;">5 SCH</td></tr> <tr><td>SON 121 SON Clinical Education II</td><td style="text-align: right;">5 SHC</td></tr> <tr><td>SON 130 Abdominal Sonography I</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>SON 131 Abdominal Sonography II</td><td style="text-align: right;">2 SHC</td></tr> <tr><td>SON 140 Gynecologic Sonography</td><td style="text-align: right;">2 SHC</td></tr> <tr><td>SON 220 SON Clinical Education III</td><td style="text-align: right;">8 SHC</td></tr> <tr><td>SON 221 SON Clinical Education IV</td><td style="text-align: right;">8 SHC</td></tr> <tr><td>SON 225 Case Studies</td><td style="text-align: right;">1 SHC</td></tr> <tr><td>SON 241 Obstetrical Sonography I</td><td style="text-align: right;">2 SHC</td></tr> <tr><td>SON 242 Obstetrical Sonography II</td><td style="text-align: right;">2 SHC</td></tr> <tr><td>SON 250 Vascular Sonography</td><td style="text-align: right;">2 SHC</td></tr> <tr><td>SON 289 Sonographic Topics</td><td style="text-align: right;">2 SHC</td></tr> </table> <p>Required Subject Areas: Anatomy and Physiology. Select one:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">BIO 163 Basic Anatomy & Physiology</td><td style="width: 20%; text-align: right;">5 SHC</td></tr> <tr><td>BIO 166 Anatomy and Physiology II</td><td style="text-align: right;">4 SHC</td></tr> <tr><td>BIO 169 Anatomy and Physiology II</td><td style="text-align: right;">4 SHC</td></tr> </table>	SON 110 Introduction to Sonography	3 SHC	SON 111 Sonographic Physics	4 SHC	SON 120 SON Clinical Education I	5 SCH	SON 121 SON Clinical Education II	5 SHC	SON 130 Abdominal Sonography I	3 SHC	SON 131 Abdominal Sonography II	2 SHC	SON 140 Gynecologic Sonography	2 SHC	SON 220 SON Clinical Education III	8 SHC	SON 221 SON Clinical Education IV	8 SHC	SON 225 Case Studies	1 SHC	SON 241 Obstetrical Sonography I	2 SHC	SON 242 Obstetrical Sonography II	2 SHC	SON 250 Vascular Sonography	2 SHC	SON 289 Sonographic Topics	2 SHC	BIO 163 Basic Anatomy & Physiology	5 SHC	BIO 166 Anatomy and Physiology II	4 SHC	BIO 169 Anatomy and Physiology II	4 SHC	53-54 SHC	12 SHC	
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<p>C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i></p> <p>BIO, BUS, CHM, CIS, COE, CSC, CVS, ECO, HEA, HSC, MAT, PHS, PHY, and SON</p> <p><i>Foreign language courses (including ASL) that are not designated as approved other major hours may be included in all programs up to a maximum of 3 semester hours of credit.</i></p>																																					