



MEDICAL SONOGRAPHY

Health Sciences

PROGRAM OVERVIEW

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

PROGRAM HIGHLIGHTS

Southwestern's Medical Sonography graduates earn an Associate's Degree in Applied Sciences. The program is accredited by the National Commission of Allied Health Education Programs, and is taught by highly-qualified faculty who are dedicated to student achievement and academic success.

The program recently began offering students training on the latest 3-D ultrasound imaging technology. In addition to traditional two-dimensional and flat images, students may now evaluate depth within the 3-D images. This new technology is primarily used for OB-GYN and tracing fetal development in the womb.

WHY SOUTHWESTERN

- Program offers instruction in all diagnostic areas of sonography (abdomen, OB/GYN, breast, small parts, vascular).
- Highly qualified faculty use up-to-date teaching methodologies and state-of-the-industry equipment in their instruction, including newly acquired 3-D ultrasound imaging technology.
- Medical Sonography students complete clinical rotations at numerous healthcare centers throughout Western North Carolina. Students are prepared through comprehensive instruction and experience for ARDMS certification exams.
- Students will gain in-depth knowledge of the anatomy and physiology of the human body.
- As a community service, Medical Sonography students practice their ultrasound skills on volunteers throughout the community as part of a free clinical lab.

AFTER GRADUATION

Upon successful completion of this program, graduates will be prepared to work in the sonography field and do abdomen, OB/GYN, small parts and vascular ultrasound exams. They may perform examinations at the patient's bedside, in the emergency department, or in surgery.

Sonography is a very independent career and agencies readily hire for local, national and international work assignments. Graduates will be eligible to register for licensure by the American Registry of Diagnostic Medical Sonographers.

ADMISSIONS CRITERIA

Individuals desiring a career in Medical Sonography should take courses in biology, algebra and the physical sciences prior to entering the program.

This program has a limited enrollment and only admits a class in the fall of each year. Applications and supporting documents must be completed and submitted by March 15 of the year in which the student wishes to enroll in the program. If all slots have not been filled after the above deadline, there may be extensions to the deadline. Please check with the Admissions Office about the status of the program.

EMPLOYMENT OPPORTUNITIES:

Work at:

- Clinics
- Educational Institutions
- Hospitals
- Medical Centers
- Mobile Service

Perform Examinations in:

- Emergency departments
- Patient's bedside
- Operating rooms during surgery

TOP RECENT EMPLOYERS

- Angel Medical Center
- Harris Regional Hospital
- Haywood Regional Medical Center
- Sonography Services
- Swain County Hospital

NC STATE ESTIMATED ENTRY WAGE

\$27,413 - \$40,568

* Information found through the North Carolina Occupational Employment & Wages 2010

PROGRAM CONTACT INFORMATION

Health Sciences Division
1.800.447.4091 ext. 305
828.339.4305

Admissions Office
1.800.447.4091 ext. 352
828.339.4352

Fax: 828.586.3129

www.southwesterncc.edu

ASSOCIATE IN APPLIED SCIENCE DEGREE (AAS)**A45440****FALL SEMESTER 1**

| <u>Prefix</u> | <u>Number</u> | <u>Title</u> | <u>Class</u> | <u>Lab</u> | <u>Clinical</u> | <u>Credit</u> |
|---------------|---------------|----------------------------|--------------|------------|-----------------|---------------|
| BIO | 168 | Anatomy and Physiology I | 3 | 3 | 0 | 4 |
| PHY | 110 | Conceptual Physics | 3 | 0 | 0 | 3 |
| PHY | 110A | Conceptual Physics Lab | 0 | 2 | 0 | 1 |
| SON | 110 | Introduction to Sonography | 1 | 3 | 3 | 3 |
| SON | 130 | Abdominal Sonography I | 2 | 3 | 0 | 3 |
| SON | 222 | Selected SON Clinical Ed | <u>0</u> | <u>0</u> | <u>6</u> | <u>2</u> |
| | | Totals | 9 | 11 | 9 | 16 |

SPRING SEMESTER 1

| | | | | | | |
|-----|-----|---------------------------|----------|----------|----------|----------|
| BIO | 169 | Anatomy and Physiology II | 3 | 3 | 0 | 4 |
| SON | 111 | Sonographic Physics | 3 | 3 | 0 | 4 |
| SON | 120 | SON Clinical Education I | 0 | 0 | 15 | 5 |
| SON | 131 | Abdominal Sonography II | 1 | 3 | 0 | 2 |
| SON | 140 | Gynecological Sonography | <u>2</u> | <u>0</u> | <u>0</u> | <u>2</u> |
| | | Totals | 9 | 9 | 15 | 17 |

SUMMER SEMESTER 1

| | | | | | | |
|-----|-----|---------------------------|----------|----------|----------|----------|
| ENG | 111 | Expository Writing | 3 | 0 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 0 | 3 |
| SON | 121 | SON Clinical Education II | 0 | 0 | 15 | 5 |
| SON | 241 | Obstetrical Sonography I | <u>2</u> | <u>0</u> | <u>0</u> | <u>2</u> |
| | | Totals | 8 | 0 | 15 | 13 |

FALL SEMESTER 2

| | | | | | | |
|-----|-----|-------------------------------------|----------|----------|----------|----------|
| ENG | 114 | Professional Research and Reporting | 3 | 0 | 0 | 3 |
| SON | 220 | SON Clinical Education III | 0 | 0 | 24 | 8 |
| SON | 242 | Obstetrical Sonography II | 2 | 0 | 0 | 2 |
| SON | 250 | Vascular Sonography | <u>1</u> | <u>3</u> | <u>0</u> | <u>2</u> |
| | | Totals | 6 | 3 | 24 | 15 |

SPRING SEMESTER 2

| | | | | | | |
|-----|-----|---------------------------|----------|----------|----------|----------|
| SON | 221 | SON Clinical Education IV | 0 | 0 | 24 | 8 |
| SON | 225 | Case Studies | 0 | 3 | 0 | 1 |
| SON | 289 | Sonographic Topics | 2 | 0 | 0 | 2 |
| *** | *** | Humanities Elective | <u>3</u> | <u>0</u> | <u>0</u> | <u>3</u> |
| | | Totals | 5 | 3 | 24 | 14 |

Total Semester Hour Credits: 75

DIPLOMA D45440

FALL SEMESTER 1

| <u>Prefix</u> | <u>Number</u> | <u>Title</u> | <u>Class</u> | <u>Lab</u> | <u>Clinical</u> | <u>Credit</u> |
|---------------|---------------|---------------------------------|--------------|------------|-----------------|---------------|
| PHY | 110 | Conceptional Physics | 3 | 0 | 0 | 3 |
| PHY | 110A | Conceptional Physics Lab | 0 | 2 | 0 | 1 |
| SON | 110 | Introduction to Sonography | 1 | 3 | 3 | 3 |
| SON | 130 | Abdominal Sonography I | 2 | 3 | 0 | 3 |
| SON | 222 | Selected SON Clinical Education | <u>0</u> | <u>0</u> | <u>6</u> | <u>2</u> |
| | | Totals | 6 | 8 | 9 | 15 |

SPRING SEMESTER 1

| | | | | | | |
|-----|-----|--------------------------|----------|----------|----------|----------|
| SON | 111 | Sonographic Physics | 3 | 3 | 0 | 4 |
| SON | 120 | SON Clinical Education I | 0 | 0 | 15 | 5 |
| SON | 131 | Abdominal Sonography II | 1 | 3 | 0 | 2 |
| SON | 140 | Gynecological Sonography | <u>2</u> | <u>0</u> | <u>0</u> | <u>2</u> |
| | | Totals | 6 | 6 | 15 | 13 |

SUMMER SEMESTER 1

| | | | | | | |
|-----|-----|---------------------------|----------|----------|----------|----------|
| SON | 121 | SON Clinical Education II | 0 | 0 | 15 | 5 |
| SON | 241 | Obstetrical Sonography I | <u>2</u> | <u>0</u> | <u>0</u> | <u>2</u> |
| | | Totals | 2 | 0 | 15 | 7 |

FALL SEMESTER 2

| | | | | | | |
|-----|-----|----------------------------|----------|----------|----------|----------|
| ENG | 111 | Expository Writing | 3 | 0 | 0 | 3 |
| SON | 220 | SON Clinical Education III | 0 | 0 | 24 | 8 |
| SON | 242 | Obstetrical Sonography II | <u>2</u> | <u>0</u> | <u>0</u> | <u>2</u> |
| | | Totals | 5 | 0 | 24 | 13 |

Total Semester Hour Credits: 45

FACULTY

Debbie Green

debbieg@southwesterncc.edu

(828) 339.4000 or (800) 447.4091, ext. 4323

Jennifer Forrester

j_forrester@southwesterncc.edu

(828) 339.4000 or (800) 447.4091, ext. 4323