

DIAGNOSTIC MEDICAL SONOGRAPHY

ASSOCIATE OF SCIENCE

Quarter Credit Hours Required = 104

Contact Hours Required = 1432

The Diagnostic Medical Sonography program prepares students for a rewarding career in a highly specialized, health science field. Students successfully trained in this associate degree program will be prepared to work in hospitals, outpatient clinics, or private practice. Sonographers work closely with physicians and other healthcare professionals as a trusted member of the patient care team. Critical patient diagnosis is dependent on the sonographer's ability to produce quality diagnostic images which are interpreted by a physician. The areas of concentration will include ultrasound physics and instrumentation, along with abdominal, reproductive systems, obstetrical, superficial structures, and vascular scanning.

The student should understand the anatomy, physiology, and pathophysiology of organ systems; recognize the sonographic characteristics of organs; learn the protocols for a logical and thorough survey of organ systems; and provide a diagnostic impression to the interpreting physician. Students will also learn to work effectively with other healthcare professionals to promote patient safety and quality patient care.

A unique feature of the program is a comprehensive externship (360 hours), which is necessary to provide the student with hands-on experience in the field of ultrasound. This practical experience will be completed under the mentorship of qualified sonographers and physicians.

Upon successful completion of this program, students should be able to

- perform diagnostic ultrasound examinations with competency;
- evaluate sonographic images;
- explain the principles of how ultrasound machines function;
- demonstrate the ability to successfully perform in a healthcare environment;
- interact professionally with patients and other healthcare personnel; and
- coordinate a successful job search.

| | | Lecture Hours | Lab Hours | Externship Hours | Total Hours | Quarter Credit Hours |
|---|---|------------------|--------------|---------------------|----------------|----------------------------|
| FOUNDATION: | | | | | | |
| EDU 1010 | Learning Framework | 40 | 0 | 0 | 40 | 4 |
| EDU 1020 | Career Exploration/Planning | 40 | 0 | 0 | 40 | 4 |
| AREA OF CONCENTRATION: | | | | | | |
| BIO 1130 | Anatomy and Physiology: Organs and Systems | 40 | 0 | 0 | 40 | 4 |
| DMS 1010 | Ultrasound Instrumentation and Physics Principles | 40 | 0 | 0 | 40 | 4 |
| DMS 1150 | Anatomy and Physiology for Ultrasound | 40 | 0 | 0 | 40 | 4 |
| DMS 1160 | Introduction to Ultrasound Scanning | 20 | 20 | 0 | 40 | 3 |
| DMS 1400 | Female Reproductive Scanning | 20 | 20 | 0 | 40 | 3 |
| DMS 1450 | Hemodynamic Principles | 20 | 20 | 0 | 40 | 3 |
| DMS 2050 | Pathophysiology for Ultrasound | 40 | 0 | 0 | 40 | 4 |
| DMS 2110 | Obstetrical Scanning I | 20 | 20 | 0 | 40 | 3 |
| DMS 2120 | Abdominal Scanning I | 20 | 20 | 0 | 40 | 3 |
| DMS 2130 | Vascular Scanning I | 20 | 20 | 0 | 40 | 3 |
| DMS 2210 | Obstetrical Scanning II | 20 | 20 | 0 | 40 | 3 |
| DMS 2220 | Abdominal Scanning II | 20 | 20 | 0 | 40 | 3 |
| DMS 2230 | Vascular Scanning II | 20 | 20 | 0 | 40 | 3 |
| DMS 2310 | Obstetrical Scanning III | 20 | 20 | 10 | 50 | 3 |
| DMS 2320 | Abdominal Scanning III | 20 | 20 | 10 | 50 | 3 |
| DMS 2330 | Vascular Scanning III | 20 | 20 | 12 | 52 | 3 |
| DMS 2420 | Ultrasound Physics | 40 | 0 | 0 | 40 | 4 |
| DMS 2600 | Diagnostic Medical Sonography Externship | 0 | 0 | 360 | 360 | 12 |
| MED 1140 | Medical Law and Ethics | 40 | 0 | 0 | 40 | 4 |
| GENERAL EDUCATION: | | | | | | |
| These courses are to be selected in consultation with the Program Director so as to effectuate a balanced educational program. Select a total (minimum) of 24 quarter hours as indicated below: | | | | | | |
| Communications | | 120 | 0 | 0 | 120 | 12 |
| Humanities and Fine Arts | | 40 | 0 | 0 | 40 | 4 |
| Mathematics | | 40 | 0 | 0 | 40 | 4 |
| Social and Behavioral Sciences | | 40 | 0 | 0 | 40 | 4 |
| TOTAL MINIMUM QUARTER CREDIT HOURS REQUIRED | | 800 | 240 | 392 | 1432 | 104 |