

DMS - Diagnostic Medical Sonography

Courses

DMS 100 Survey of Sonography

3 Credits. 2 Lecture Hours. 2 Lab Hours.

A course on foundational concepts in the field of medical sonography. Topics include: the role of the sonographer in the healthcare setting, ultrasound system controls and functions, image production and display, and basic ultrasound physics.

Prerequisites: BIO 151 and MCH 104 (minimum grade C for both)

Corequisites: BIO 152

DMS 111 Sonographic Principles and Instrumentation 1

3 Credits. 3 Lecture Hours. 0 Lab Hour.

A course on principles of physics in relation to ultrasound function and instrumentation. Topics include: characteristics of sound energy; using ultrasound in imaging; and waveforms, propagation, velocity, wavelength, acoustic impedance, reflection, and other types of interaction with tissue.

Prerequisites: DMS 100

Instructor Consent Required

DMS 112 Sonographic Principles and Instrumentation 2

2 Credits. 2 Lecture Hours. 0 Lab Hour.

A continuation of DMS 111. Topics include: integrating knowledge of physics with instrumentation theory and applications; understanding advanced signal processing, complex instrumentation, recording devices, biological effects, hemodynamics, Doppler principles, and quality control methods; and producing high quality diagnostic images.

Prerequisites: DMS 111

DMS 255 Ethics and Medical Law in Sonography

1 Credit. 1 Lecture Hour. 0 Lab Hour.

A course on ethical and legal issues related to the sonography profession. Topics include: laboratory accreditation, professional education, and research standards and practices.

Prerequisites: DMSC 232 and DMSC 242, or DMSG 232 and DMSG 242 (minimum grade C for all)