

DIAGNOSTIC MEDICAL SONOGRAPHY (SONO)

SONO 111, ORIENTATION TO DIAGNOSTIC MEDICAL SONOGRAPHY I (1)

Topics to include the history and development of the Diagnostic Medical Sonography profession, sonography organizations, professional protocol and patient interaction, professional ethics and legal issues, repetitive stress injury prevention, sonographic terminology, image orientation, scanning techniques, concepts of ultrasound physics and instrumentation and a review of basic patient care techniques used in sonography.

General Education: GE01, GE04, GE05, GE08

Course Entry Requirement(s): Prerequisite: Admission into the Diagnostic Medical Sonography program and ALHN 107

Typically Offered: Fall Semester

SONO 122, IMAGING MODALITIES I (1)

Introduction to the various imaging modalities. Basic function, advantages and disadvantages of the various modalities. Identification of general anatomy, image orientation, and common pathologies in each modality with comparisons applied to sonography will also be discussed. Students with a radiography background and have ARRT certification are not required to take this course.

General Education: GE02, GE03, GE07

Course Entry Requirement(s): Prerequisite: Admission into the diagnostic medical sonography program.

Typically Offered: Fall Semester

SONO 131, INTRODUCTION TO DIAGNOSTIC MEDICAL SONOGRAPHY 7 (19)

Detailed study of normal anatomy, physiology, sonographic appearances, and scanning techniques of normal and common pathologic conditions of the abdominal vasculature, liver, gallbladder, pancreas, kidneys, female pelvis, early and advanced pregnancy and superficial structures. Clinical and college laboratory REQUIRED. (A special fee will be assessed.)

General Education: GE01, GE02, GE04, GE05, GE06, GE07, GE08

Course Entry Requirement(s): Prerequisite: Admission into the diagnostic medical sonography program and SONO 111, BIOG 222 and BIOG 123; Corequisite: SONO 221

Typically Offered: Spring Semester

SONO 215, DIAGNOSTIC MEDICAL SONOGRAPHY I 7 (23)

Detailed study of the abdomen and small parts, discussing pathologic conditions and their sonographic appearances. Clinical and college laboratory required. (A special fee will be assessed.)

General Education: GE01, GE02, GE04, GE05, GE06, GE07

Course Entry Requirement(s): Prerequisite: SONO 221 and SONO 131; Corequisite: SONO 122

Typically Offered: Summer Semester

SONO 221, ULTRASOUND PHYSICS AND INSTRUMENTATION I 2 (2)

This course is designed to provide the student in-depth details of the various modes used in diagnostic sonography and examples of each, physical principles of diagnostic ultrasound as it interacts with tissue, and the construction and function of single-element and multi-element transducers. This course requires prior knowledge of scientific formulas and metric conversions.

General Education: GE02, GE06, GE07

Course Entry Requirement(s): Prerequisite: SONO 111 and PHYC 115; Corequisite: SONO 131

Typically Offered: Spring Semester

SONO 222, ULTRASOUND PHYSICS AND INSTRUMENTATION II 2 (2)

Continuation of Ultrasound Physics and Instrumentation, including Doppler physics, hemodynamics, image processing recording devices, artifacts, biological effects, and quality control.

General Education: GE02, GE06

Course Entry Requirement(s): Prerequisite: SONO 215 and SONO 221; Corequisite SONO 223

Typically Offered: Fall Semester

SONO 223, DIAGNOSTIC MEDICAL SONOGRAPHY II 8 (35)

The identification of various gynecologic disease processes, fetal development and various obstetrical, genetic pathologies based on sonographic appearance and clinical history. Clinical and college laboratory required. (A special fee will be assessed.)

General Education: GE01, GE02, GE03, GE04, GE05, GE06, GE07, GE08

Course Entry Requirement(s): Prerequisite: SONO 215 and SONO 221; Corequisite SONO 222

Typically Offered: Fall Semester

SONO 224, ADVANCED DIAGNOSTIC MEDICAL SONOGRAPHY STUDIES 6 (34)

In depth discussions of sonography of the neonatal head, neonatal/infant spinal cord, neonatal/infant hip, abdominal vascular assessment (hepatic, mesenteric, and renal), organ transplants, and the nonvascular extremity, in addition, more common basic vascular exams as well as discussion of current advanced studies. Clinical and college laboratory required. (A special fee will be assessed.)

General Education: GE02, GE04, GE05, GE07

Course Entry Requirement(s): Prerequisite: SONO 222 and SONO 223; Corequisite SONO 229

Typically Offered: Spring Semester

SONO 229, PROFESSIONAL ISSUES IN DIAGNOSTIC MEDICAL SONOGRAPHY 1 (1)

Professional issues in diagnostic medical sonography to include administrative planning, resume writing, job interviewing skills, registry review, continuing education and career advancement.

General Education: GE01, GE02, GE04, GE08

Course Entry Requirement(s): Prerequisite: SONO 222 and SONO 223; Corequisite SONO 224

Typically Offered: Spring Semester

SONO 299, INDIVIDUALIZED STUDIES IN SONOGRAPHY 1-3 (1)

An in-depth study of areas in sonography presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to six (6) times for a total of six (6) credit hours.

Course Entry Requirement(s): Prerequisite: Division approval

Typically Offered: Offer as required