

MEDICAL SONOGRAPHY (SON)

SON-110 Introduction to Sonography 3 (Credits)

This course provides an introduction to medical sonography. Topics include applications, sonographic terminology, history, patient care, ethics, and basic skills. Upon completion, students should be able to define professionalism and sonographic applications and perform basic patient care skills and preliminary scanning techniques.

Class: 1 Lab: 3 Clinical: 0 Work: 0

SON-111 Sonographic Physics 4 (Credits)

This course introduces ultrasound physical principles, bioeffects, and sonographic instrumentation. Topics include sound wave mechanics, transducers, sonographic equipment, Doppler physics, bioeffects, and safety. Upon completion, students should be able to demonstrate knowledge of sound wave mechanics, transducers, sonography equipment, the Doppler effect, bioeffects, and safety.

Class: 3 Lab: 3 Clinical: 0 Work: 0

SON-112 Sonographic Terminology 1 (Credits)

This course is designed to systematically guide the student to become familiar with medical language to prepare him/her to communicate as a medical professional. Topics include an introduction to the formation of medical terminology using word roots, prefixes and suffixes, relating these terms to body structure and function. Upon completion, students should effectively communicate disease and disorder terms, surgical terms, procedural terms, and other related medical terms.

Class: 1 Lab: 0 Clinical: 0 Work: 0

SON-120 SON Clinical Ed I 5 (Credits)

This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

Class: 0 Lab: 0 Clinical: 0 Work: 0

State Prerequisite(s): SON-110

SON-121 SON Clinical Ed II 5 (Credits)

This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

Class: 0 Lab: 0 Clinical: 0 Work: 0

State Prerequisite(s): SON-120

SON-130 Abdominal Sonography I 3 (Credits)

This course introduces abdominal and small parts sonography. Emphasis is placed on the sonographic anatomy of the abdomen and small parts with correlated laboratory exercises. Upon completion, students should be able to recognize and acquire basic abdominal and small parts images.

Class: 2 Lab: 3 Clinical: 0 Work: 0

SON-131 Abdominal Sonography II 2 (Credits)

This course covers abdominal and small parts pathology recognizable on sonograms. Emphasis is placed on abnormal sonograms of the abdomen and small parts with correlated sonographic cases. Upon completion, students should be able to recognize abnormal pathological processes in the abdomen and on small parts sonographic examinations.

Class: 1 Lab: 3 Clinical: 0 Work: 0

State Prerequisite(s): SON-130

SON-140 Gynecological Sonography 2 (Credits)

This course is designed to relate gynecological anatomy and pathology to sonography. Emphasis is placed on gynecological relational anatomy, endovaginal anatomy, and gynecological pathology. Upon completion, students should be able to recognize normal and abnormal gynecological sonograms.

Class: 2 Lab: 0 Clinical: 0 Work: 0

State Prerequisite(s): SON-110

SON-220 Sonography Clinical Ed III 8 (Credits)

This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

Class: 0 Lab: 0 Clinical: 0 Work: 0

State Prerequisite(s): SON-121

SON-221 SON Clinical Ed IV 8 (Credits)

This course provides continued active participation off campus in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

Class: 0 Lab: 0 Clinical: 0 Work: 0

State Prerequisite(s): SON-220

SON-222 Selected Sonographic Clinical Education 2 (Credits)

This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating selected sonographic examinations. Upon completion, students should be able to image, process, and evaluate selected sonographic examinations.

Class: 0 Lab: 0 Clinical: 0 Work: 0

State Corequisite(s): SON-110

SON-225 Case Studies 1 (Credits)

This course offers the opportunity to present interesting cases found during clinical education. Emphasis is placed on presentation methods which integrate patient history, laboratory results, and sonographic findings with reference to current literature. Upon completion, students should be able to correlate information necessary for complete presentation of case studies.

Class: 0 Lab: 3 Clinical: 0 Work: 0

State Prerequisite(s): One: SON-110 or CVS-163

SON-241 Obstetrical Sonography I 2 (Credits)

This course covers normal obstetrical sonography techniques, the normal fetal environment, and abnormal first trimester pregnancy states. Topics include gestational dating, fetal anatomy, uterine environment, and first trimester complications. Upon completion, students should be able to produce gestational sonograms which document age, evaluate the uterine environment, and recognize first trimester complications.

Class: 2 Lab: 0 Clinical: 0 Work: 0

State Prerequisite(s): SON-110

SON-242 Obstetrical Sonography II 2 (Credits)

This course covers second and third trimester obstetrical complications and fetal anomalies. Topics include abnormal fetal anatomy and physiology and complications in the uterine environment. Upon completion, students should be able to identify fetal anomalies, fetal distress states, and uterine pathologies.

Class: 2 Lab: 0 Clinical: 0 Work: 0

State Prerequisite(s): SON-241

SON-250 Vascular Sonography 2 (Credits)

This course provides an in-depth study of the anatomy and pathology of the vascular system. Topics include peripheral arterial, peripheral venous, and cerebrovascular disease testing. Upon completion, students should be able to identify normal vascular anatomy and recognize pathology of the vascular system.

Class: 1 Lab: 3 Clinical: 0 Work: 0

SON-271 Doppler Sonography Topics 2 (Credits)

This course covers Doppler principles and instrumentation. Topics include basic Doppler principles, CW Doppler, pulsed-wave Doppler, color Doppler, and power Doppler. Upon completion, students be able to demonstrate knowledge of Doppler principles and instrumentation.

Class: 1 Lab: 3 Clinical: 0 Work: 0

SON-273 Advanced Vascular Sonography 3 (Credits)

This course covers advanced scanning techniques and pathological states. Emphasis is placed on identifying, recognizing, and imaging abnormal peripheral arterial, peripheral venous, and cerebrovascular conditions. Upon completion, students should be able to identify and image abnormal vascular conditions.

Class: 2 Lab: 2 Clinical: 0 Work: 0

State Prerequisite(s): SON-250

SON-275 Pediatric Sonography 2 (Credits)

This course covers the various applications of sonography in pediatrics including normal anatomy and pathology related to neurosonology and general pediatric body imaging resulting in students appreciation of the various applications of sonography in pediatrics. Topics include neonatal neurosonology and the application of sonography in pediatric abdominal, gynecologic, small part, and the musculoskeletal system with emphasis placed on the sonographic appearance of normal anatomy and pathology. Upon completion, students should be able to demonstrate knowledge of pediatric sonography and perform various applications of sonography in neurosonology, abdominal imaging, small part imaging, and gynecology.

Class: 2 Lab: 0 Clinical: 0 Work: 0

State Corequisite(s): SON-110

SON-289 Sonographic Topics 2 (Credits)

This course provides an overview of sonographic topics in preparation for certification examinations. Emphasis is placed on registry preparation. Upon completion, students should be able to demonstrate a comprehensive knowledge of sonography and be prepared for the registry examinations.

Class: 2 Lab: 0 Clinical: 0 Work: 0

State Prerequisite(s): SON-110