

Diagnostic Medical Sonography (DMS)

Courses

DMS A101 Introduction to Sonography 2 Credits

Introduces the history of ultrasound, its medical application, the sonographer's role, ergonomics, terminology, approaches to scanning, anatomical relationships and sectional anatomy.

Registration Restrictions: Department approval

DMS A102 Foundations of Sonography 2 Credits

Introduces the profession and basic skills of sonography with emphasis on sonographic terminology, sonographer and patient safety, effective communication, and legal/ethical aspects.

Registration Restrictions: Departmental approval

DMS A103 Patient Care in Sonography 2 Credits

Introduces general patient care and communication skills used working in sonography. Includes clinical procedures and techniques, infection control, and safety.

Registration Restrictions: Department approval

DMS A104 Foundations of Sonography and Patient Care 3 Credits

Provides an overview of sonography and the practitioner's role. Examines professionalism, patient care, infection control, safety, medical ethics, and law related to sonography.

DMS A105 Principles and Instrumentation I 3 Credits

Introduces the physical principles of sound waves, acoustic parameters, ultrasound transducers, instrumentation, equipment operation, and the methods of image formation and storage.

Registration Restrictions: Department approval

DMS A107 Abdominal Sonography I 2 Credits

Provides the theoretical basis for performing sonographic procedures. Introduces examination protocols and imaging evaluation for the abdominal organs, superficial and small parts. Introduces cross sectional anatomy and normal sonographic appearance of abdominal vasculature, abdominal organs, superficial structures and small parts.

Registration Restrictions: Department approval

DMS A109 OB and Gyn Sonography I 3 Credits

Introduces the embryology, anatomy and physiology of the female reproductive system and developing fetus. Includes normal sonographic appearance of anatomy.

Registration Restrictions: Department approval

DMS A205 Principles and Instrumentation II 3 Credits

Discusses advanced imaging, Doppler principles, image artifacts, quality assurance programs and biologic effects. Includes application of advanced and Doppler imaging methods.

Registration Restrictions: Department approval

Prerequisites: DMS A105 with a minimum grade of C.

DMS A207 Abdominal Sonography II 2 Credits

Provides the theoretical basis for performing sonographic procedures. Discusses the pathologic conditions of abdominal vasculature, organs, superficial structure and small parts. Characterization of sonographic findings, scanning protocols and techniques are introduced.

Registration Restrictions: Department approval

Prerequisites: DMS A107 with a minimum grade of C.

DMS A209 OB/Gyn Sonography II 2 Credits

Discusses the pathologic conditions of the female reproductive system and fetal development. Includes sonographic findings and scanning protocols.

Registration Restrictions: Department approval

Prerequisites: DMS A109 with a minimum grade of C.

DMS A211 Small Parts Sonography 1 Credit

Introduces the anatomy, physiology and pathologic conditions of superficial structures and small parts. Includes normal sonographic appearance of anatomy, sonographic findings and scanning protocols.

Registration Restrictions: Departmental approval

DMS A213 Vascular Technology 2 Credits

Introduces the anatomy, physiology, hemodynamics and pathologic conditions of the cardiovascular system. Includes normal sonographic appearance of anatomy, sonographic findings and scanning protocols.

Registration Restrictions: Departmental approval

DMS A215 Breast Sonography 1 Credit

Introduces the anatomy, physiology and pathologic conditions of breast tissue. Includes normal sonographic appearance of anatomy, sonographic findings and scanning protocols.

Registration Restrictions: Department approval

DMS A217 Fundamentals of Sonography Lab 1 Credit

Provides students the opportunity to apply didactic knowledge using sonographic equipment in a supervised laboratory environment.

Registration Restrictions: Department approval

Prerequisites: DMS A102 with a minimum grade of C and DMS A105 with a minimum grade of C and DMS A107 with a minimum grade of C and DMS A109 with a minimum grade of C.

DMS A219 Practical Sonography Lab 3 Credits

Provides students with an opportunity to apply scanning techniques in a realistic, supervised laboratory environment.

Registration Restrictions: Admission to the Associate of Applied Science in Diagnostic Medical Sonography, successful completion of the American Registry of Diagnostic Medical Sonography (ARDMS) Sonography Principles and Instrumentation (SPI) exam, all required immunizations, and department approval

Prerequisites: DMS A217 with a minimum grade of P.

DMS A221 Pediatric Sonography 1 Credit

Introduces the anatomy, physiology and pathologic conditions for neonatal and pediatric patients. Includes normal sonographic appearance of anatomy, sonographic findings and scanning protocols.

Registration Restrictions: Department approval

DMS A295A Clinical Practicum I 9 Credits

Provides supervised clinical ultrasound experience in a health care facility. Students will observe, assist with and perform a variety of sonographic examinations.

Registration Restrictions: Department approval

Prerequisites: DMS A219 with a minimum grade of P.

DMS A295B Clinical Practicum II 9 Credits

Provides continued supervised clinical ultrasound experience in a health care facility. Students will perform a variety of sonographic examinations.

Registration Restrictions: Department approval

Prerequisites: DMS A295A with a minimum grade of P.

DMS A392 DMS Seminar 3 Credits

Provides continued discussion of disease pathogenesis. Includes student presentation of case studies with correlation of sonographic, clinical and other diagnostic testing information.

Registration Restrictions: Department approval

Prerequisites: DMS A295A with a minimum grade of P.

DMS A395 Clinical Practicum III 3 Credits

Provides continued supervised clinical ultrasound experience in a health care facility. Students will perform a variety of sonographic examinations.

Registration Restrictions: Department approval

Prerequisites: DMS A295B with a minimum grade of P.