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 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 anatomy.
Registration Restrictions: Department approval

DMS A107 Abdominal Sonography I 2 Credits
Introduces the anatomy and physiology of abdominal vasculature, organs, systems and structures. Includes normal sonographic appearance of anatomy.
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
Discusses the pathologic conditions of abdominal vasculature, organs, systems and structures. Includes sonographic findings and scanning protocols.
Registration Restrictions: Departmental approval
Prerequisites: DMS A107 with a minimum grade of C.

DMS A209 OB and 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: Departmental 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: Departmental 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: Departmental 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: Departmental 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: Departmental 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: Departmental approval
Prerequisites: DMS A295A with a minimum grade of P.
DMS A392 Pathophysiology 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: Departmental 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: Departmental approval
Prerequisites: DMS A295B with a minimum grade of P.