

# DMS - DIAGNOSTIC MED SONOGRAPH

## DMS — Diag Med/Vasc Sonography

### **DMS 101 Ultrasound Physics and Instr I** 2-0-2 **Prerequisites:** PHY 118

This course is a study of fundamental principles of acoustic physics including sound waves, sound wave propagation, sound wave interactions, image production, ultrasound transducers, transducer arrays, transducer operation, imaging modes, and biological effects.

### **DMS 112 Ob/Gyn Sonography I** 2-3-3

This course studies sonographic imaging methods of the female pelvis, the fetus and the gravid uterus, emphasizing anatomy, physiology, pathology, and embryology.

### **DMS 114 DMS Cross Sectional Anatomy** 2-3-3 **Prerequisites:** AHS 110

This course is a study of cross-sectional and sagittal anatomy of the abdomen along with basic scanning techniques.

### **DMS 115 Vascular Anatomy & Physiology** 1-0-1 **Corequisites:** DMS 200, DMS 136, DMS 137

This course is a study of the anatomy of the blood vessels with emphasis on normal sonographic appearance.

### **DMS 116 Abdominal Ultrasound** 3-3-4 **Prerequisites:** DMS 114

This course is an in-depth study of abdominal ultrasound including anatomy, physiology, and pathology. The sonographic appearance of normal anatomical structures and the more common abnormalities affecting the abdomen are also discussed.

### **DMS 120 Sonographic Instrumentation II** 3-0-3 **Prerequisites:** DMS 101

This course is an advanced study of machine instrumentation, including display modes, components of an ultrasound system, quality control, an introduction to Doppler, the biological effects of ultrasound, artifacts, and future trends.

### **DMS 122 Abdominal Sonography** 0-3-1 **Prerequisites:** DMS 101

This course is a study of the less common but significant pathological conditions of the abdominal organs and systems, advanced disease processes, differential diagnosis associated with these pathologies, and advanced scanning methods.

### **DMS 124 Ob/Gyn Sonography II** 1-3-2 **Prerequisites:** DMS 112

This course is an advanced study of the gynecological pathologic processes, including fetal anomalies/abnormalities and advanced fetal gestational age testing.

### **DMS 126 Advanced Sonographic Topics** 1-3-2 **Corequisites:** DMS 122

This course is a detailed study of the abdomen, superficial structures and neurosonography with emphasis on the anatomy, physiology, and pathological conditions seen with sonographic imaging.

### **DMS 130 Selected Topics in Sonography** 1-3-2 **Prerequisites:** DMS 126

This course is a study of thyroid, breast, testicular and other superficial structures of the body by ultrasound with emphasis on anatomy, physiology, and pathological conditions associated with these organs.

### **DMS 135 Breast Ultrasound** 1-0-1 **Prerequisites:** DMS 126

This course is a study of breast ultrasound to include, anatomy, physiology, and pathology. The sonographic appearance of normal anatomical structures and the more common pathologies affecting the breast are also discussed.

### **DMS 136 Intro to Vascular Ultrasound** 0-3-1 **Corequisites:** DMS 200, DMS 115, DMS 137

This course is an introduction to sonographic evaluation of the blood vessels to include types of studies performed and basic scanning techniques for peripheral vascular ultrasound.

### **DMS 137 Vascular Applications** 3-3-4 **Corequisites:** DMS 200, DMS 136, DMS 115

This course is a supervised clinical experience and practice designed to continue the student's development of vascular ultrasound scanning skills and techniques.

### **DMS 150 Clinical Applications I** 0-21-7

This course is an introduction to the diagnostic ultrasound department, including initial examination performances, machine operation, and administrative/record keeping procedures.

### **DMS 160 Clinical Applications II** 0-21-7 **Prerequisites:** DMS 175

This course covers routine sonography procedures in the clinical environment.

**DMS 164 Intro to Clinical Education** 0-6-2

This course is a supervised clinical experience and practice designed to introduce the student to the Diagnostic Ultrasound Department.

**DMS 166 Advanced Clinical Education** 0-21-7

**Prerequisites:** DMS 150

This course is supervised clinical experience and practice designed to continue and advance the student's ultrasound scanning skills and techniques.

**DMS 167 Imaging Practicum** 0-24-8

**Prerequisites:** DMS 165 or DMS 166

This course is supervised clinical experience and practice designed to continue and advance the student's ultrasound scanning skills and techniques. This clinical course also provides an opportunity for students to explore advancements in sonography.

**DMS 175 Clinical Education III** 0-18-6

**Prerequisites:** DMS 150

This course covers advanced sonographic modalities in the clinical environment.

**DMS 200 Seminars in Sonography** 2-0-2

**Corequisites:** DMS 137, DMS 136, DMS 115

This course is an in-depth review of ultrasound physics, anatomy, physiology, and pathology and provides test preparation for the national certification exams. Emphasis is placed on the interpretation of clinical tests and scanning techniques relative to the development of a differential diagnosis.