

# DIAGNOSTIC MED. SONO. (DMSO)

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## DMSO 1166

### Practicum I

CRT HRS:1 LEC HRS:0 LAB HRS:0 OTH HRS:7

This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program; DMSO 1460 with a "B" or better, DMSO 1210, DMSO 1302, DMSO 1441 and DMSO 2405 with a "C" or better and completion of DMSO 1167 with a "B" or better, DMSO 2351 and DMSO 2353 with a "C" or better or concurrent enrollment in DMSO 2351, DMSO 1167, and DMSO 2353.

## DMSO 1167

### Practicum II

CRT HRS:1 LEC HRS:0 LAB HRS:0 OTH HRS:7

This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program; DMSO 1460 with a "B" or better, DMSO 1210, DMSO 1302, DMSO 1441 and DMSO 2405 with a "C" or better and completion of DMSO 1166 with a "B" or better, DMSO 2351 and DMSO 2353 with a "C" or better or concurrent enrollment in DMSO 2351, DMSO 1166, and DMSO 2353.

## DMSO 1210

### Introduction to Sonography

CRT HRS:2 LEC HRS:2 LAB HRS:0 OTH HRS:0

This course is an introduction to the profession of sonography and the role of the sonographer. Emphasis is on medical terminology, ethical/legal aspects, written and verbal communication, and professional issues relating to registry, accreditation, professional organizations and history of the profession.

*Prerequisite:* Must be HESI A2 complete and Departmental Approval Required.

## DMSO 1302

### Basic Ultrasound Physics

CRT HRS:3 LEC HRS:3 LAB HRS:1 OTH HRS:0

This course is about the basic acoustical physics and acoustical waves in human tissue. Emphasis is on ultrasound transmission in soft tissues, attenuation of sound energy, parameters affecting sound transmission and resolution of sound beams.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program and current enrollment in the following: DMSO 1460, DMSO 1441 and DMSO 2405.

## DMSO 1342

### Intermediate Ultrasound Physics

CRT HRS:3 LEC HRS:3 LAB HRS:1 OTH HRS:0

This course offers a continuation of Basic Ultrasound Physics, which includes interaction of ultrasound with tissues, mechanics of ultrasound production and display, various transducer designs and construction, quality assurance, bioeffects, and image artifacts. It may introduce methods of Doppler flow analysis.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program; DMSO 1167 with a "B" or better, DMSO 2353 with a "C" or better and concurrent enrollment in DMSO 2366, DMSO 2342 and DMSO 2441.

## DMSO 1441

### Abdominopelvic Sonography

CRT HRS:4 LEC HRS:4 LAB HRS:1 OTH HRS:0

This course includes an overview of normal anatomy and physiology of the abdominal and pelvic cavities as related to scanning techniques, transducer selection, and scanning protocols.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program and current enrollment in the following: DMSO 1302, DMSO 1460 and DMSO 2405.

## DMSO 1460

### Clinical

CRT HRS:4 LEC HRS:0 LAB HRS:0 OTH HRS:15

This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program and current enrollment in DMSO 1302, DMSO 1441 and DMSO 2405.

## DMSO 2230

### Capstone: Advanced Ultrasound and Review

CRT HRS:2 LEC HRS:2 LAB HRS:1 OTH HRS:0

This course covers knowledge, skills and professional values within a legal and ethical framework addressing emerging technologies and professional development.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program; DMSO 2366 with a "B" or better, DMSO 2342, DMSO 1342 and DMSO 2441 with a "C" or better and concurrent enrollment in DMSO 2367.

## DMSO 2342

### Sonography of High Risk Obstetrics

CRT HRS:3 LEC HRS:3 LAB HRS:1 OTH HRS:0

This course provides an overview of maternal disease and fetal abnormalities. It includes scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program; DMSO 1167 with a "B" or better, DMSO 2353 with a "C" or better and concurrent enrollment in DMSO 2366, DMSO 1342 and DMSO 2441.

## DMSO 2351

### Doppler Physics

CRT HRS:3 LEC HRS:3 LAB HRS:0 OTH HRS:0

This course provides an overview of the Doppler and hemodynamic principles relating to arterial and venous imaging and testing.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program; DMSO 1460 with a "B" or better, DMSO 1210, DMSO 1302, DMSO 1441 and DMSO 2405 with a "C" or better and completion of DMSO 1166 with a "B" or better, DMSO 1167 with a "B" or better, and DMSO 2353 with a "C" or better or concurrent enrollment in DMSO 1166, DMSO 1167, and DMSO 2353.

## DMSO 2353

### Sonography of Superficial Structures

CRT HRS:3 LEC HRS:3 LAB HRS:0 OTH HRS:0

This course provides a detailed study of normal and pathological superficial structures as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program; DMSO 1460 with a "B" or better, DMSO 1210, DMSO 1302, DMSO 1441 and DMSO 2405 with a "C" or better and completion of DMSO 1166 with a "B" or better, DMSO 1167 with a "B" or better, and DMSO 2351 with a "C" or better or concurrent enrollment in DMSO 1166, DMSO 1167, and DMSO 2351.

**DMSO 2366****Practicum III**

CRT HRS:3 LEC HRS:0 LAB HRS:0 OTH HRS:21

This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program; DMSO 1167 with a "B" or better, DMSO 2353 with a "C" or better and concurrent enrollment in DMSO 2342, DMSO 1342 and DMSO 2441.

**DMSO 2367****Practicum IV**

CRT HRS:3 LEC HRS:0 LAB HRS:0 OTH HRS:21

This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program; DMSO 2366 with a "B" or better, DMSO 2342, DMSO 1342 and DMSO 2441 with a "C" or better and concurrent enrollment in DMSO 2230.

**DMSO 2405****Sonography of Obstetrics/Gynecology**

CRT HRS:4 LEC HRS:4 LAB HRS:1 OTH HRS:0

This course provides a detailed study of the pelvis and obstetrics/gynecology as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program and current enrollment in the following: DMSO 1302, DMSO 1460 and DMSO 1441.

**DMSO 2441****Sonography of Abdominopelvic Pathology**

CRT HRS:4 LEC HRS:4 LAB HRS:1 OTH HRS:0

This course provides an overview of the pathologies and disease states of the abdomen and pelvis as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Emphasis in the endocavity sonographic anatomy and procedures including pregnancy.

*Prerequisite:* Admissions to the Diagnostic Medical Sonography Program; DMSO 1167 with a "B" or better, DMSO 2353 with a "C" or better and concurrent enrollment in DMSO 2366, DMSO 2342 and DMSO 1342.