

DMSO - DIAG MEDICAL SONOGRAPHY

DMSO 1110 Introduction to Sonography 1 Credit Hour (1 Lec, 1 Lab)

An introduction to the profession of sonography and the role of the sonographer. Emphasis 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: College ready in Reading, Writing, and Mathematics

Course Type: Technical/Vocational Course

Prerequisite: ((Writing-College Ready with a minimum score of 1300, Reading-College Ready with a minimum score of 1300, and Math-College Ready with a minimum score of 1300), (ENGL 376 with a grade of C_DV or higher, READ 376 with a grade of C_DV or higher, and MATH 376 with a grade of C_DV or higher), (ENGL 376 with a grade of P_DV or higher, READ 376 with a grade of P_DV or higher, and MATH 376 with a grade of P_DV or higher), (MATH 314 with a grade of C_DV or higher and INRW 376 with a grade of C_DV or higher), (MATH 324 with a grade of C_DV or higher and INRW 376 with a grade of C_DV or higher), (TSIA2 Math CRC with a minimum score of 950, TSIA2 ELAR CRC with a minimum score of 945, and TSIA2 Essay with a minimum score of 5), (TSIA2 Math CRC with a minimum score of 950, TSIA2 Essay with a minimum score of 5, and TSIA2 ELAR Diagnostic with a minimum score of 5), (TSIA2 Math Diagnostic with a minimum score of 6, TSIA2 ELAR CRC with a minimum score of 945, and TSIA2 Essay with a minimum score of 5), (TSIA2 Math Diagnostic with a minimum score of 6, TSIA2 Essay with a minimum score of 5, and TSIA2 ELAR Diagnostic with a minimum score of 5), (MATH 314 with a grade of P_DV or higher and INRW 376 with a grade of P_DV or higher), or (MATH 324 with a grade of P_DV or higher and INRW 376 with a grade of P_DV or higher))

DMSO 1201 Techniques of Medical Sonography 2 Credit Hours (1 Lec, 3 Lab)

Fundamentals of scanning techniques; scan protocols and procedures within the laboratory setting utilizing live scanning and/or simulated experience.

Course Type: Technical/Vocational Course

Corequisite: BIOL 2302, DMSO 1202, DMSO 1260, PHIL 2306

DMSO 1202 Basic Ultrasound Physics 2 Credit Hours (1 Lec, 3 Lab)

Foundations of acoustical physics and acoustical waves in human tissue. Emphasis on ultrasound transmission in soft tissues, attenuation of sound energy, parameters affecting sound transmission, and resolution of sound beams.

DMSO 1210 Introduction to Sonography 2 Credit Hours (1 Lec, 3 Lab)

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

Course Type: Technical/Vocational Course

DMSO 1242 Intermediate Ultrasound Physics 2 Credit Hours (1 Lec, 3 Lab)

Study of the interaction of ultrasound with tissues, mechanics of ultrasound production and display, various transducer designs and construction, quality assurance, bioeffects, and image artifacts. May introduce methods of Doppler flow analysis.

DMSO 1260 Clinical - DMS/Sonographer and US Technician 2 Credit Hours (12 Lab)

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: DMSO 1201, DMSO 1202

DMSO 1261 Clinical - DMS/Sonographer and US Technician 2 Credit Hours (0 Lec, 12 Lab)

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: DMSO 1242, DMSO 1441, DMSO 2405, DMSO 1260

DMSO 1262 Clinical - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician 2 Credit Hours (0 Lec, 12 Lab)

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.

Course Type: Technical/Vocational Course

DMSO 1263 Clinical - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician 2 Credit Hours (0 Lec, 12 Lab)

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.

Course Type: Technical/Vocational Course

DMSO 1341 Abdominopelvic Sonography 3 Credit Hours (2 Lec, 4 Lab)

Normal anatomy and physiology of the abdominal and pelvic cavities as related to scanning techniques, transducer selection, and scanning protocols.

Course Type: Technical/Vocational Course

Corequisite: DMSO 1242, DMSO 1261

DMSO 1355 Sonographic Pathophysiology 3 Credit Hours (2 Lec, 2 Lab)

Pathology and pathophysiology of the organs and structures visualized with ultrasound.

Course Type: Technical/Vocational Course

Corequisite: DMSO 2242, DSVT 1103

DMSO 1441 Abdominopelvic Sonography 4 Credit Hours (3 Lec, 4 Lab)

Normal anatomy and physiology of the abdominal and pelvic cavities as related to scanning techniques, transducer selection, and scanning protocols Prerequisite: DMSO 1201, DMSO 1202

DMSO 2230 Advanced Ultrasound and Review 2 Credit Hours (1 Lec, 3 Lab)

Preparation for medical sonography credentialing exams. Advanced medical sonography topics such as professional development and evolving sonographic applications and practices.

Course Type: Technical/Vocational Course

Corequisite: DMSO 2245, PSYC 2314

DMSO 2242 Advanced Obstetrics Sonography 2 Credit Hours (1 Lec, 3 Lab)

Maternal disease, pregnancy complications, and fetal abnormalities. Includes scanning techniques and protocols, patient history, and laboratory data.

Course Type: Technical/Vocational Course

Corequisite: DMSO 1355, DMSO 2260, DSVT 1103

DMSO 2245 Advanced Sonography Practices 2 Credit Hours (2 Lec)

Exploration of advanced sonographic procedures and emerging ultrasound applications. Prerequisite: DSVT 1103, DMSO 2342, DMSO 1355, DMSO 2261

DMSO 2253 Sonography of Superficial Structures 2 Credit Hours (1 Lec, 2 Lab)

Detailed study of normal and pathological superficial structures as related to patient history, laboratory data, and scanning techniques and protocols.

Course Type: Technical/Vocational Course

Corequisite: DMSO 2230, DMSO 2245, DMSO 2261, PSYC 2314

DMSO 2260 Clinical - DMS/Sonographer and US Technician 2 Credit Hours (0 Lec, 12 Lab)

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: DMSO 1261

DMSO 2261 Clinical - DMS/Sonographer and US Technician 2 Credit Hours (0 Lec, 12 Lab)

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: DMSO 2260

DMSO 2262 Clinical - DMS/Sonographer and US Technician 2 Credit Hours (0 Lec, 12 Lab)

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: DSVT 1103, DMSO 2342, DMSO 1355, DMSO 2261

DMSO 2305 Sonography of Obstetrics/Gynecology 3 Credit Hours (2 Lec, 4 Lab)

Detailed study of the pelvis and obstetrics/gynecology as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols.

Course Type: Technical/Vocational Course

Corequisite: DMSO 1242, DMSO 1261, DMSO 1341

DMSO 2342 Sonography of High Risk Obstetrics 3 Credit Hours (2 Lec, 2 Lab)

Maternal disease and fetal abnormalities. Includes scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Prerequisite: DMSO 2260

DMSO 2405 Sonography of Obstetrics/Gynecology 4 Credit Hours (3 Lec, 4 Lab)

Detailed study of the pelvis and obstetrics/gynecology as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Prerequisite: DMSO 1201, DMSO 1202