

DIAGNOSTIC MEDICAL SONOGRAPHY (DMS)

DMS-100 Fundamentals of Diagnostic Medical Sonography 2 Units (LAB 48-54, LEC 16-18)

This is an introductory course for students accepted into the Diagnostic Medical Sonography program. The student will learn basic scanning skills, transducers and monitor orientation using ultrasound machines. The Society of Diagnostic Medical Sonographers Code of ethics and Clinical Practice Standards will be discussed along with sonography terms and scanning planes. Students will learn to identify and image anatomy using ultrasound machines.

Prerequisite: Acceptance into the Diagnostic Medical Sonography Program.
Transfers to CSU only

DMS-101 Pathophysiology 3 Units (LEC 48-54)

This course examines the general principles of the disease process of organs and systems of the human anatomy. It includes chronic and acute diseases of the respiratory, musculoskeletal and gastrointestinal tract diseases; diseases of the genitourinary systems and reproductive organs.

Prerequisite: Acceptance into the Diagnostic Medical Sonography Program.
Transfers to CSU only

DMS-102 Sonography Medical Ethics 3 Units (LEC 48-54)

This course introduces the DMS student to the laws related to patient rights, intentional torts, negligence, and malpractice litigation. The course will alert the students of their rights, duties, and legal responsibilities within the context of their function as a member of the allied health care team.

Prerequisite: Acceptance into the Diagnostic Medical Sonography Program.
Transfers to CSU only

DMS-103 Patient Care Techniques for Sonographers 3 Units (LAB 48-54, LEC 32-36)

This course is designed to teach the DMS student basic patient care techniques including the responsibilities and relationships of various allied health departments in a health care setting. Aseptic and surgical techniques will be discussed along with universal precautions. Emergency conditions and procedures are included.

Prerequisite: Acceptance into the Diagnostic Medical Sonography Program.
Transfers to CSU only

DMS-104 Clinical Observation 2 Units (LAB 96-108)

This course is offered as on-the-job observation in a sonography department of a selected, affiliated hospital/medical center. The student will observe the functions, procedures, and protocols of an ultrasound department and will learn to read physician orders, compare them with the patients chart and proceed with the requested examination. The student will demonstrate proper sterile technique and universal precautions. The student will learn the functions of the sonography equipment used in the clinical training site.

Prerequisite: DMS-100 (with a grade of C or better).
Transfers to CSU only

DMS-110 Sectional Imaging 2 Units (LEC 32-36)

This course instructs students to recognize cross sectional anatomy and understand the relationship of anatomical structures to each other on computerized tomography, magnetic resonance, and ultrasound imaging exams. Students will be instructed on how to recognize and correlate normal anatomy and abnormal pathology as seen on multiple imaging modalities. This correlation is important for students to understand when reviewing prior imaging exams. Students will identify anatomy of the brain, thorax, abdomen, pelvis, and vascular system.

Prerequisite: DMS-100 with a grade of C or better.
Transfers to CSU only

DMS-114 Clinical Experience I 5 Units (LAB 240-270)

This course is offered as on the job training in a sonography department of a selected affiliated hospital/medical center. The student will begin to demonstrate the ability to perform sonographic examinations of the abdomen and superficial structures according to protocol guidelines established by the program and the clinical education center utilizing state of the art equipment.

Prerequisite: DMS-104 (with a grade of C or better).
Transfers to CSU only

DMS-120 General Sonography Scanning Lab (formerly Abdomen Scanning) 1.5 Unit (LAB 72-81)

This course includes patient care protocols, interpretation of clinical laboratory tests, related clinical signs and symptoms, normal and abnormal sonographic appearances, and gray-scale pattern differences are discussed. Imaging practicals include exams of the abdomen, breast, thyroid, and testicular anatomy. Lab practicals are performed on live volunteers or ultrasound simulator for abdominal and thyroid. Lab practicals for breast and testicular are performed on ultrasound phantoms.

Prerequisite: DMS-100 (with a grade of C or better).
Transfers to CSU only

DMS-122 Ultrasound Pathology I
3 Units (LEC 48-54)

This course will include abnormal sonographic and doppler patterns of disease processes, pathology and pathophysiology of the abdomen, breast, thyroid, prostate and scrotum. Students will recognize, identify and appropriately document pathology of the abdomen and superficial structures.

Prerequisite: DMS-100 (with a grade of C or better) or Sonography Program Graduate or RDMS- Registered Diagnostic Medical Sonographer through ARDMS or RDMS- Registered Diagnostic Cardiac Sonographer through ARDMS or RVT- Registered Vascular Technologist through ARDMS or RCS- Registered Cardiac Sonographer through CCI or CVS- Certified Vascular Sonographer through CCI.

Transfers to CSU only

DMS-124 Clinical Experience II
10 Units (LAB 480-540)

This course is offered as advanced on the job training in a sonography department of a selected affiliated hospital/medical center. The student will demonstrate the ability to perform sonographic examinations of the abdomen and superficial structures according to protocol guidelines established by the program and the clinical education center utilizing state of the art equipment.

Prerequisite: DMS-114 (with a grade of C or better).

Transfers to CSU only

DMS-125 Ultrasound Physics and Instrumentation I
2 Units (LEC 32-36)

This is the first of two sequential courses designed to teach Ultrasound Physics and Instrumentation. The focus of Ultrasound Physics and Instrumentation I is the basic mathematics used in the physics of sound, elementary principles of ultrasound physics and instrumentation, the propagation of ultrasound through tissue, Ultrasound transducers, pulse echo instruments and the principles of pulse echo imaging.

Prerequisite: Acceptance into the Diagnostic Medical Sonography Program.

Transfers to CSU only

DMS-130 Obstetric/Gynecology Scanning
1.5 Unit (LAB 72-81)

This course includes instruction on Obstetric/Gynecology anatomy, pathology, and sonography scanning techniques. Interpretation of clinical laboratory tests, related clinical signs and symptoms, and normal and abnormal sonographic patterns will be discussed. Demonstrations on basic scanning techniques and protocols will be included.

Prerequisite: DMS-120 (with a grade of C or better).

Transfers to CSU only

DMS-132 Ultrasound Pathology II
3 Units (LEC 48-54)

This course examines normal and abnormal sonographic patterns of pelvic and obstetric disease processes, pathology, and pathophysiology. Students will recognize, identify, and appropriately document pathology of the female pelvis, gravid uterus, and fetus. Case studies will be evaluated and discussed.

Prerequisite: DMS-122 (with a grade of C or better) or Sonography Program Graduate. or RDMS license-Registered Diagnostic Medical Sonographer through ARDMS or RVT license-Registered Vascular Technologist through ARDMS or CVT license- Certified Vascular Technologist through CCI or RDMS license- Registered Diagnostic Cardiac Sonographer through ARDMS or RCS- Registered Cardiac Sonographer license through CCI.

Transfers to CSU only

DMS-134 Ultrasound Seminar
2 Units (LEC 32-36)

This course is a review of ultrasound physics/instrumentation, abdomen and superficial structures, and presentation of case studies. Discussion of interesting and/or rare cases pertaining to clinical symptoms, sonographic patterns and technical pitfalls will be included. New trends in diagnostic imaging are introduced. Practice testing to prepare for the ARDMS registry examinations and instruction on writing a resume will be included in the course.

Prerequisite: DMS-132 and DMS-140 (with a grade of C or better).

Transfers to CSU only

DMS-135 Ultrasound Physics and Instrumentation II
2 Units (LEC 32-36)

This is the second of two courses designed to teach Ultrasound Physics and Instrumentation. The focus of this course is image storage and display, hemodynamics, doppler, color flow and color power imaging, artifacts found in ultrasound, quality assurance, and the bioeffects and safety of ultrasound.

Prerequisite: DMS-125 (with a grade of C or better).

Transfers to CSU only

DMS-136 Clinical Experience III (formerly Clinical Experience IV)
10 Units (LAB 480-540)

This course is offered as a continuation of advanced on the job training in a sonography department of a selected affiliated hospital/medical center. The student will demonstrate the ability to perform sonographic examinations of the abdomen, superficial structures, pelvic, and obstetric exams according to protocol guidelines established by the program and the clinical education center utilizing state of the art equipment.

Prerequisite: DMS-124 (with a grade of C or better).

Transfers to CSU only

DMS-140 Introduction to Vascular Imaging
2 Units (LEC 32-36)

This course is to provide the DMS student with an introduction to vascular scanning and evaluating hemodynamics or blood flow within the body; specifically the carotid artery, and the arteries and veins of the extremities. The course will introduce duplex imaging in the normal vessel and the expected outcomes when scanning a diseased or stenotic vessel. The student will learn to correlate related diagnostic imaging procedures (angiogram, MRA and CT) with the sonographic appearances.

Prerequisite: DMS-120 (with a grade of C or better) or Sonography Program Graduate or RDMS license-Registered Diagnostic Medical Sonographer through ARDMS or RVT license- Registered Vascular Technologist through ARDMS or RDCS license- Registered Diagnostic Cardiac Sonographer through ARDMS or CVT license- Certified Vascular Technologist through CCI or RCS license- Registered Cardiac Sonographer through CCI.

Transfers to CSU only

DMS-299 Special Projects: Diagnostic Medical Sonography
1-3 Unit (IS 16-54)

Students with previous course work in the program may do special projects that involve research and special study. The actual nature of the project must be determined in consultation with the supervising instructor.

Prerequisite: Two Diagnostic Medical Sonography classes must be completed prior to enrollment; a contract must be completed with the instructor prior to enrollment.

Transfers to CSU only