

RAD SCI GENERAL SONOGRAPHY (RSS)

RSS 321: Patient Care & Serv in Diag Im

Presents basic concepts of the healthcare delivery system and an introduction to medical imaging and radiation sciences with a focus on sonography. Emphasizes patient care, diversity, sterile procedure, ergonomics and body mechanics, communication, essential sonographer skills, professional ethics and medicolegal issues.

Credits: 2

College: Jefferson College of Health Professions

Schedule Type: Lecture, Lecture/On-Line, On-Line

RSS 322: Patient Care in Rad Oncology

Credits: 2

College: Jefferson College of Health Professions

Schedule Type: Lecture, Lecture/On-Line, On-Line

RSS 323: Patient Care & Serv in Diag Im

Credits: 1

College: Jefferson College of Health Professions

Schedule Type: Lecture, Lecture/On-Line, On-Line

RSS 400: Ultrasound Physics I

Presents general acoustic principles including energy transfer through wave propagation, transducer construction, spatial and temporal resolution, beam steering and focusing, imaging modes, and 3D/4D ultrasound. Emphasizes applied principles of instrumentation, including knobology and image optimization.

Credits: 2

College: Jefferson College of Health Professions

Schedule Type: Lecture, Lecture/On-Line, On-Line

RSS 401: Sonog Cross-Sectional Anat

Credits: 2

College: Jefferson College of Health Professions

Schedule Type: Lecture, On-Line

RSS 402: Abdominal Sonography I

Presents normal abdominal anatomy, physiology, related vasculature, cross sectional relationships, and scanning techniques regarding the abdominal sonographic examination. This course is designed to introduce students to the various imaging planes and correlative methods that are used to assess the abdomen.

Credits: 2

College: Jefferson College of Health Professions

Schedule Type: Lecture, On-Line

RSS 403: Ultrasound Physics II

Presents properties of ultrasound's interaction with tissue and instrumentation of the ultrasound machine. Topics include computer technology, creation and storage of the ultrasound image, hemodynamics, spectral, color and power Doppler, acoustic artifacts, bioeffects & safety, and quality assurance/quality improvement relative to ultrasound. Advanced topics such as new imaging methods and new developments in ultrasound technology will also be introduced.

Prerequisite: RSS 400

Credits: 2

College: Jefferson College of Health Professions

Schedule Type: Lecture

RSS 404: Pelvic Sonography

This course is designed to present female pelvis anatomy, physiology, pathology, related vasculature, scanning techniques and protocols regarding the pelvic sonographic examination. Normal and abnormal first trimester pregnancy is also included in this course.

Credits: 3

College: Jefferson College of Health Professions

Schedule Type: Lecture, On-Line

RSS 405: Obstetrical Sonography

Presents obstetrical applications of diagnostic ultrasound. Reviews the anatomy and physiology of fetal development including embryology and genetics. Presents normal and abnormal second and third trimester sonography as well as scanning protocols. Course includes obstetric biometry, screening and diagnostic testing.

Credits: 3

College: Jefferson College of Health Professions

Schedule Type: Lecture

RSS 408: Sonography Review Seminar

Presents a comprehensive review of physics, abdominal, pelvic, obstetrical and high resolution imaging applications of general sonography in preparation for the diagnostic medical sonography national certification examinations.

Credits: 2

College: Jefferson College of Health Professions

Schedule Type: Lecture, Lecture/On-Line, On-Line

RSS 412: Clinical Sonography I

Students perform sonographic procedures during clinical rotations at affiliate sites under the supervision of designated clinical instructors. Evaluation of cognitive, effective and psychomotor skills is based on competency in scanning protocols and techniques, professionalism and proficiency in patient care.

Credits: 6

College: Jefferson College of Health Professions

Schedule Type: Clinical

RSS 413: Clinical Sonography II

Continuation of Radiologic Sciences S 412, Clinical Sonography I. Provides supervised clinical practice of diagnostic medical sonography in a university laboratory and clinical setting. Students are responsible for imaging and recording anatomic structures and pathology needed to perform optimal examinations. Requires intensive, hands-on clinical practice. Prerequisite: RSS 412

Credits: 6

College: Jefferson College of Health Professions

Schedule Type: Clinical

RSS 414: Clinical Sonography III

Continuation of Radiologic Sciences S 413, Clinical Sonography II. Continuation of Radiologic Sciences S 413, Clinical Sonography II. Students will increase proficiency in identification of pathology and improve ability to perform complete studies with supervision. Prerequisite: RSS 413

Credits: 8

College: Jefferson College of Health Professions

Schedule Type: Clinical

RSS 415: Sonography Procedures I

Presents, demonstrates and guides hands-on practice on equipment utilized in a general sonography laboratory to evaluate general sonography anatomy. Emphasizes the clinical application, operation, knobology, applied ultrasound physics, and instrumentation associated with such equipment combined with two-dimensional imaging of abdomino-pelvic organs, regions and related vasculature.

Credits: 2**College:** Jefferson College of Health Professions**Schedule Type:** Lab, Lecture/Lab**RSS 416: High Resolution Sonography**

This course presents the latest techniques in high resolution ultrasound imaging, including but not limited to breast, thyroid, male pelvic, pediatric examinations, soft tissue structures, interventional procedures and elastography. Includes discussion of anatomy, physiology, pathology, and related vasculature of high resolution sonography examinations.

Credits: 2**College:** Jefferson College of Health Professions**Schedule Type:** Lecture**RSS 417: Sonography Procedures II**

"Presents, demonstrates, and guides hands-on practice on equipment utilized in a general sonography laboratory to evaluate general sonography and obstetrical anatomy. Emphasizes the clinical application, operation, knobology, applied ultrasound physics, and instrumentation associated with such equipment combined with two-dimensional imaging of abdomino-pelvic organs, obstetrics, and related vasculature. Prerequisite: RSS 415

Credits: 2**College:** Jefferson College of Health Professions**Schedule Type:** Lab, Lecture**RSS 418: Clinical Sonography IV****Credits:** 6**College:** Jefferson College of Health Professions**Schedule Type:** Clinical**RSS 419: Clinical Sonography V****Credits:** 6**College:** Jefferson College of Health Professions**Schedule Type:** Clinical**RSS 421: Clinical Sonography VI****Credits:** 8**College:** Jefferson College of Health Professions**Schedule Type:** Clinical**RSS 422: Abdominal Sonography II**

"This course is designed to present abdominal pathology, benign and malignant lesions, inflammation, infections, metastatic lesions, vasculature lesions, scanning techniques and protocols regarding the abdominal sonographic examination as it relates to pathology.

Prerequisite: RSS 402

Credits: 2**College:** Jefferson College of Health Professions**Schedule Type:** Lecture**RSS 481: Cardiac Review Seminar****Credits:** 2**College:** Jefferson College of Health Professions**Schedule Type:** Clinical, Seminar**RSS 493: Ind Study/Vascular Technology****Credits:** 3**College:** Jefferson College of Health Professions**Schedule Type:** Independent Study**RSS 498: Spec Topics in General Sonog**

Presents new techniques and information, clinical experiences and presentation of case studies in a weekly seminar format. Includes an overview of sonographic contrast agents, musculoskeletal sonography, three and four-dimensional sonography, and new advances in ultrasound technology.

Credits: 2**College:** Jefferson College of Health Professions**Schedule Type:** Lecture**RSS 499: Sonography Ind Study****Credits:** 1**College:** Jefferson College of Health Professions**Schedule Type:** Independent Study