

Radiation Therapy Program Courses (Radiation Sciences) (RSTH)

RSTH Courses

This is a list of courses with the subject code RSTH. For more information, see Radiation Sciences (Carver College of Medicine) in the catalog.

RSTH:3100 Introduction to Radiation Therapy 2 s.h.

Introduction to cancer as a disease; defining methods to treat cancer with emphasis on radiation therapy; simulation, planning, and treatment delivery of radiation therapy. Requirements: acceptance to radiation sciences therapy program.

RSTH:3101 Introduction to Radiation Therapy Lab 1 s.h.

Provides students with the fundamental concepts and techniques used in radiation therapy. Students will gain knowledge and hands-on experience with radiation therapy equipment and procedures, learning how to safely and effectively deliver radiation treatments. Key topics include patient safety and communication, treatment room orientation, patient positioning, imaging, workflow, and radiation safety.

RSTH:3110 Medical Physics I 1-3 s.h.

Introduction to radiation used in clinical setting; fundamental physical units, measurements, principles, atomic structure and types of radiation; X-ray generating equipment, X-ray production, and its interaction with matter. Requirements: admission to free radical and radiation biology program or acceptance to radiation sciences therapy program, and maxillofacial or radiation oncology resident. Same as FRRB:3110.

RSTH:3120 Radiation Therapy Clinical Internship I 3 s.h.

Student rotations through different radiation therapy related areas; assist, practice, and test radiation therapy principles learned in didactic setting; skill building for care and management of patients; conduction of performance assessments and completion of guideline objectives for each rotation; performance expectations become progressively higher as students gain experience and skills. Requirements: acceptance to radiation sciences therapy program.

RSTH:3132 Radiobiology in Radiation Therapy 1 s.h.

Continuation of RSP:3130; geared towards students enrolled in the radiation therapy program.

RSTH:3205 Principles of Radiation Therapy I 2 s.h.

Didactic coursework in principles of radiation therapy; historic and current aspects of cancer treatment; role of radiation therapist; patient care, treatment delivery accessories, tumor localization treatment delivery protocols. Prerequisites: RSTH:3100. Requirements: enrollment in radiation therapy program.

RSTH:3206 Principles of Radiation Therapy I Lab 1 s.h.

Provides students with the fundamental knowledge and techniques used in radiation therapy. Students gain hands-on experience with radiation therapy equipment and treatment procedures, learning how to safely and effectively deliver radiation treatments covered in the didactic portion of the course. Additionally, students learn about topics related to radiation physics, treatment planning, patient positioning, special procedures, patient education, and chart checks. Prerequisites: RSTH:3100.

RSTH:3215 Medical Physics II 0-3 s.h.

Treatment units used in external radiation therapy; beam calculations, isodose distributions, brachytherapy, quality assurance and quality management, protection and safety. Prerequisites: RSTH:3110. Requirements: admission to free radical and radiation biology program or acceptance to radiation sciences therapy program. Same as FRRB:3215.

RSTH:3225 Radiation Therapy Clinical Internship II 3 s.h.

Student rotations through different radiation therapy related areas; assist, practice, and test radiation therapy principles learned in didactic setting; skill building for care and management of patients; conduction of performance assessments and completion of guideline objectives for each rotation; performance expectations become progressively higher as students gain experience and skills. Prerequisites: RSTH:3120. Requirements: acceptance to radiation sciences therapy program.

RSTH:3325 Radiation Therapy Clinical Internship III 4 s.h.

Student rotations through different radiation therapy related areas; assist, practice, and test radiation therapy principles learned in didactic setting; skill building for care and management of patients; conduction of performance assessments and completion of guideline objectives for each rotation; performance expectations become progressively higher as students gain experience and skills. Prerequisites: RSTH:3225. Requirements: acceptance to radiation sciences therapy program.

RSTH:4105 Principles of Radiation Therapy II 2 s.h.

Evaluation and management of neoplastic disease using knowledge in arts and sciences; critical thinking and basis of ethical clinical decision-making; epidemiology, etiology, detection, diagnosis, patient condition, treatment and prognosis of neoplastic disease. Prerequisites: RSTH:3205. Requirements: enrollment in radiation sciences therapy program.

RSTH:4125 Radiation Therapy Clinical Internship IV 4 s.h.

Student rotations through different radiation therapy related areas; assist, practice, and test radiation therapy principles learned in didactic setting; skill building for care and management of patients; conduction of performance assessments and completion of guideline objectives for each rotation; performance expectations become progressively higher as students gain experience and skills. Prerequisites: RSTH:3325. Requirements: acceptance to radiation sciences therapy program.

RSTH:4225 Radiation Therapy Clinical Internship **5 s.h.**

Student rotations through different radiation therapy related areas; assist, practice, and test radiation therapy principles learned in didactic setting; skill building for care and management of patients; conduction of performance assessments and completion of guideline objectives for each rotation; performance expectations become progressively higher as students gain experience and skills. Prerequisites: RSTH:4125. Requirements: acceptance to radiation sciences therapy program.

RSTH:4230 Radiation Therapy Capstone **3 s.h.**

Professional development; review of concepts. Prerequisites: RSTH:4105. Requirements: acceptance to radiation sciences therapy program.