

Radiation Sciences Program Courses (RSP)

RSP Courses

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

RSP:1100 Introduction to the Radiation Sciences 1 s.h.

Exploration of radiation sciences field (radiologic technology, nuclear medicine and PET, diagnostic medical sonography, radiation therapy, computed tomography, magnetic resonance imaging, cardiovascular interventional); introduction to basic principles and modalities associated with the field in preparation for application to radiation sciences or nuclear medicine technology major.

RSP:2110 Pathology for Radiation Sciences 2 s.h.

Broad overview of common human diseases for the radiation sciences professional. Emphasis on disease prevalence, morbidity and mortality, risk factors, diagnosis, treatment, and prevention strategies. Fundamental vocabulary and concepts, basic disease processes, and the role of medical imaging and therapy in the diagnosis and treatment of disease are explored.

RSP:2120 Patient Care for the Radiation Sciences 3 s.h.

Foundation for providing care to clients during radiographic examinations; taking medical histories, basic life support, medical emergencies, vital sign assessment, body mechanics, infection control, sterile techniques, intravenous equipment, administration; advance concepts in client assessment and monitoring, including evaluation and monitoring of clients in pain, and clients in acute and chronic states of illness; communication techniques, role playing. Requirements: acceptance to radiation science degree track.

RSP:3130 Introduction to Radiation Safety and Radiobiology

1 s.h.

Instruction on safe operation of radiation producing equipment and handling of radioactive materials; origin and/or derivation of certain formulae and techniques useful in radiation protection programs; regulatory agencies, regulations, and regulatory guides pertinent to student's field; emphasis on applied aspects of radiation protection; characteristics and biological effects of ionizing radiations, properties and uses of radioisotopes, medical applications, and biological basis for protection procedures. Requirements: enrollment in radiation sciences or nuclear medicine technology program. Same as FRRB:3130.

RSP:3210 Medical Ethics and Law

2 s.h.

Introduction to ethical reasoning and problem solving; integration of knowledge about patient care and ethical/legal issues which occur in process of providing care; ethical principles of autonomy, beneficence, justice, nonmaleficence, paternalism, Patient's Bill of Rights, resolving moral dilemmas; legal principles of malpractice, intentional torts, negligence. Requirements: radiation science or nuclear medicine technology major.

RSP:3220 Radiation Sciences Quality Management and Health Care Administration

2 s.h.

Introduction to quality management and health care administration topics relevant for the radiation sciences professional. Students are introduced to quality improvement tools, methodologies utilized in healthcare projects, health care economics, coding, and reimbursement. Students learn how medical informatics and artificial intelligence impact the field of medical imaging and therapy.

RSP:4110 Research Methodology for Radiation Sciences

3 s.h.

Introduction to research concepts and methods for the radiation science professional. Requirements: radiation sciences or nuclear medicine technology major.