RADIATION THERAPY (RADT)

RADT 1001 Principles and Practices of Radiation Therapy I (3 Credits)
Content is designed to provide an introduction to radiation therapy. The responsibilities of the radiation therapist will be examined to include instruction in treatment techniques, delivery and patient anatomy. Lab assignments will be utilized to simulate clinical settings and to further the students understanding of the roles of a radiation therapist.
Prerequisites: Program Admission
Corequisite: RADT 1195
Previous: Legacy Equivalent(s): RDT* 101

RADT 1002 Principles and Practices of Radiation Therapy II (3 Credits)
A continuation of RADT 1001. Historic and current aspects of cancer treatment are covered, along with the roles and responsibilities of the radiation therapist for the more complex radiation techniques. The treatment prescription, techniques, delivery, side effect management and equipment components are discussed. Lab assignments will be utilized to simulate clinical settings.
Prerequisites: RADT 1001
Corequisite: RADT 1395
Previous: Legacy Equivalent(s): RDT* 102

RADT 1040 CT Imaging and Sectional Anatomy (3 Credits)
Content will introduce students to computed tomography imaging methods. Students will identify normal anatomical structures via a variety of imaging formats.
Prerequisites: BIO 2112
Previous: Legacy Equivalent(s): RDT* 140

RADT 1195 Clinical Practice I (2 Credits)
Supervised clinical experience involving introduction of the student to radiation therapy practices. Students will apply principles learned in the classroom to develop skills in patient care, communication, clinical procedures, and radiation protection.
Prerequisites: Admission to the program.
Corequisite: RADT 1001
Previous: Legacy Equivalent(s): RDT* 111

RADT 1295 Clinical Practice II (1 Credits)
Supervised clinical experience involving the continued development of student skills for general radiation therapy practices. Students will apply principles learned in the classroom to develop skills in patient care, communication, clinical procedures, and radiation protection. Students will begin to demonstrate proficiency on ARRT competencies. Students will be assigned to clinical affiliates.
Prerequisites: RADT 1001
Previous: Legacy Equivalent(s): RDT* 112

RADT 1395 Clinical Practice III (2 Credits)
Supervised clinical experience involving the continued development of student skills for general radiation therapy practices. Students will apply principles learned in the classroom to develop skills in patient care, communication, clinical procedures, and radiation protection. Students will continue to demonstrate proficiency on ARRT competencies. Students will be assigned to clinical affiliates.
Prerequisites: RADT 1295
Corequisite: RADT 2020
Previous: Legacy Equivalent(s): RDT* 113

RADT 1495 Clinical Practice IV (3 Credits)
Supervised clinical experience involving the continued development of student skills for general radiation therapy practices. Students will apply principles learned in the classroom to continue to develop skills in patient care, communication, clinical procedures, and radiation protection. Students will demonstrate proficiency on ARRT competencies. Students will be assigned to clinical affiliates.
Prerequisites: RADT 1395
Previous: Legacy Equivalent(s): RDT* 114

RADT 2001 Principles and Practices of Radiation Therapy III (3 Credits)
The principles and practice content for radiation therapy examines the management of neoplastic disease and promotes both critical thinking and ethical decision-making. The epidemiology, etiology, detection, diagnosis, treatment and prognosis of neoplastic disease are evaluated in relation to histology, anatomical site and patterns of spread. The radiation therapist's responsibility in the management of neoplastic disease will be examined and linked to specific professional skills within their scope. This course covers cancers of the breast, respiratory, genitourinary, gastrointestinal, gynecologic, and central nervous system. Addresses all disease discussed in Oncology I.
Prerequisites: RADT 1002
Corequisite: RADT 2222
Previous: Legacy Equivalent(s): RDT* 202

RADT 2002 Principles and Practices of Radiation Therapy IV (3 Credits)
This course builds on skills learned in RADT 2001, focusing on radiographic anatomy, cross-sectional anatomy, simulator techniques, and treatment planning through lectures and laboratory experiments. Addresses all diseases discussed in Oncology II.
Prerequisites: RADT 2001
Corequisite: RADT 2395 and RADT 2025
Previous: Legacy Equivalent(s): RDT* 203

RADT 2018 Understanding Cancer (3 Credits)
Content is designed to provide the student the fundamentals of cancer biology and cancer treatment. The management of neoplastic disease will be examined and evaluated including epidemiology, etiology, prevention, detection, diagnosis, patient condition, treatment, and prognosis.
Prerequisites: Program Admission
Previous: Legacy Equivalent(s): BIO* 218

RADT 2020 Treatment Planning I (3 Credits)
Treatment planning content explains factors that influence clinical planning of patient treatment. This includes isodose descriptions, patient contouring, radiobiologic considerations, d o s ime tri c calculations, and basic treatment planning.
Prerequisites: RST 1005 (MCC)
Corequisite: RADT 1395
Previous: Legacy Equivalent(s): RDT* 220

RADT 2021 Treatment Planning II (3 Credits)
Clinical applications of treatment planning including treatment planning considerations, evaluation, and implementation. This includes isodose descriptions, patient contouring, radiobiologic considerations, dosimetric calculations, compensation, and clinical application of treatment beams.
Prerequisites: RADT 2020
Corequisite: RADT 2001
Previous: Legacy Equivalent(s): RDT* 221

RADT 2024 Radiobiology and Protection (3 Credits)
Radiation biology content presents basic concepts and principles including interactions of radiation with cells, tissues and the body as a whole, and resultant health effects. This content discusses the theories and principles of tolerance dose, time-dose relationships, fractionation schemes and the relationship of these principles to the clinical practice of radiation therapy. Radiation protection content presents the basic principles of radiation protection and safety for the radiation therapist. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are included, as well as the specific responsibilities of radiation therapists.
Prerequisites: RST 1005
Previous: Legacy Equivalent(s): RDT* 224

RADT 2025 Radiation Therapy Physics (3 Credits)
Content is designed to review and expand concepts and theories in the radiation physics course. Detailed analysis of the structure of matter, properties of radiation, nuclear transformations, x-ray production and interactions of ionizing radiation are emphasized. Also presented are treatment units used in external radiation therapy, measurement and quality of ionizing radiation produced, absorbed dose measurement, dose distribution and scatter analysis.
Prerequisites: RST 1005
Previous: Legacy Equivalent(s): RDT* 225

RADT 2032 Radiation Oncology II (2 Credits)
Content is designed to examine and evaluate the management of neoplastic disease. The epidemiology, etiology, detection, diagnosis, patient condition, treatment and prognosis of neoplastic disease will be presented, discussed and evaluated in relationship to histology, anatomical site and patterns of spread.
Prerequisites: RADT 2222
Corequisite: RADT 2395
Previous: Legacy Equivalent(s): RDT* 233

RADT 2040 Operational and Quality Management in Radiation Therapy (2 Credits)
Quality management, quality assurance, safety and operations content describe the development of a culture of safety through quality control and assurance checks. This process includes the clinical aspects of patient care, medical records, treatment delivery, localization equipment and treatment planning equipment. The role of the various therapy radiation team members in quality management will be discussed as well as the legal and regulatory implications for maintaining optimal patient care. Accreditation agencies and the radiation therapist's role in the accreditation process will also be covered.
Prerequisites: RADT 2020
Previous: Legacy Equivalent(s): RDT* 240

RADT 2090 Radiologic Science Seminar (3 Credits)
This course will contribute to the body of knowledge and allow the student to effectively analyze resources to promote growth in the profession, foster the future and increase awareness of the profession in the global community. This content is geared to increase and disseminate intellectual inquiry, information literacy and the use of scholarly research methods. This course also includes a comprehensive review of the curriculum with testing in preparation for The American Registry of Radiologic Technologists (ARRT) examination.
Prerequisites: RADT 2021
Previous: Legacy Equivalent(s): RDT* 250

RADT 2098 Spcl Tpcs in Radiation Theraph (1 Credits)
Special Topics in Radiation Therapy

RADT 2195 Clinical Practice V (3 Credits)
Supervised clinical experience involving the continued development of student skills for general radiation therapy practices. Students will apply principles learned in the classroom to advance skills in patient care education, communication, clinical procedures, and radiation protection. Students will demonstrate proficiency on The American Registry of Radiologic Technologists (ARRT) competencies. Students will be assigned to clinical affiliates.
Prerequisites: RADT 1495
Previous: Legacy Equivalent(s): RDT* 211

RADT 2222 Radiation Oncology I (2 Credits)
Content is designed to examine and evaluate the management of neoplastic disease. The epidemiology, etiology, detection, diagnosis, patient condition, treatment and prognosis of neoplastic disease will be presented, discussed and evaluated in relationship to histology, anatomical site and patterns of spread.
Prerequisites: RADT 1002
Corequisite: RADT 2001
Previous: Legacy Equivalent(s): RDT* 222

RADT 2295 Clinical Practice VI (1 Credits)
Supervised clinical experience involving the continued development of student skills for general radiation therapy practices. Students will apply principles learned in the classroom to advance skills in patient care education, communication, clinical procedures, radiation protection and treatment planning. Students will demonstrate proficiency on The American Registry of Radiologic Technologists (ARRT) competencies. Students will be assigned to clinical affiliates.
Prerequisites: RADT 2195
Previous: Legacy Equivalent(s): RDT* 212

RADT 2395 Clinical Practice VII (3 Credits)
Supervised clinical experience involving the continued development of student skills for radiation therapy practices. Students will apply principles learned in the classroom to develop skills in patient care, communication, advanced clinical procedures, and radiation protection. Students must complete proficiency on The American Registry of Radiologic Technologists (ARRT) competencies. Students will be assigned to clinical affiliates.
Prerequisites: RADT 2195
Corequisite: RADT 2002 and RADT 2025
Previous: Legacy Equivalent(s): RDT* 213