

# HEALTH SCIENCES

(413) 662-5153

[www.mcla.edu/academics/academic-departments/health-sciences](http://www.mcla.edu/academics/academic-departments/health-sciences)  
(<https://www.mcla.edu/academics/academic-departments/health-sciences/>)

Chairperson: Justin Golub, Ph.D.

Email: [J.Golub@mcla.edu](mailto:J.Golub@mcla.edu)

## Health Sciences Major

The general Health Sciences degree prepares students to pursue careers and advanced study in a variety of health fields.

Students graduating with a major in Health Sciences will be able to:

- Understand and apply fundamental concepts in the discipline;
- Find and analyze primary literature in the field;
- Design an experiment to test a hypothesis;
- Demonstrate appropriate technical skills in the laboratory;
- Analyze data, with appropriate statistical analysis;
- Communicate the findings of a scientific experiment or information about a pathology.

## MCLA - Russell Sage College Applied Nutrition and Nutrition and Dietetics Articulation Programs

Strong students who have met the requirements in the articulation agreement are guaranteed admission to the Master of Science in Applied Nutrition and Master of Science in Nutrition and Dietetics programs at Russell Sage College in Albany and Troy, NY.

## MCLA - Russell Sage College Articulation Program in Pre-Occupational Therapy

Strong students who meet the requirements outlined in the articulation agreement gain preferred admission to the M.S. in Occupational Therapy program at Russell Sage College in Albany and Troy, NY.

Total MCLA - Russell Sage College Articulation Program in Occupational Therapy Requirements.....35 cr

## MCLA - Russell Sage College Articulation Program in Pre-Physical Therapy

Strong students who meet the requirements outlined in the articulation agreement gain preferred admission to the Doctor of Physical Therapy program at Russell Sage College in Albany and Troy, NY.

## Health Science Achievement Award

This award recognizes the achievement of a student in their junior year (at least 1 full semester of classwork remaining) of the Health Science, Athletic Training, and Public Health and Community Health Education major(s). Factors for consideration are GPA, course and department involvement (independent research, TA, SI, etc.), and extracurricular activities.

## Health Sciences Programs

- Environmental Health Minor (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/environmental-health-minor/>)
- Health and Society Minor (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-and-society-minor/>)
- Health Sciences - Medical Technology Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-medical-technology-concentration-bs/>)
- Health Sciences - Nutrition Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-nutrition-concentration-bs/>)
- Health Sciences - Pre-Occupational Therapy Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-pre-occupational-therapy-concentration-bs/>)
- Health Sciences - Pre-Physical Therapy Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-pre-physical-therapy-concentration-bs/>)
- Health Sciences - Pre-Physician Assistant Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-pre-physician-assistant-concentration-bs/>)
- Health Sciences - Radiologic Technology Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-radiologic-technology-concentration-bs/>)
- Health Sciences - Sports Medicine Concentration, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-sports-medicine-concentration-bs/>)
- Health Sciences, B.S. (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/health-sciences-bs/>)
- Public Health Minor (<https://catalog.mcla.edu/undergraduate/academic-programs-study/health-sciences/public-health-minor/>)

## Health Courses

### HLTH 100 Clinical Observation

1 cr

Allows the student to learn about a specific health care field through direct observation of clinical practice. The student will work with a faculty sponsor and a clinical supervisor. Students will complete clinical observation and will participate in scheduled discussions about the observation experience. This course is graded on a pass-fail basis and is repeatable to 3 credits. HLTH 100 may be paired with BIOL 500 Independent Study for advanced exploration of the field.

**Prerequisite:** Department approval

**Repeatable:** Maximum of 3 credits

### HLTH 105 Medical Terminology

1 cr

Allows recognition and accurate use of terminology that describes the human body and its pathological processes, conditions and diseases. Terminology related to procedures and clinical tests will also be addressed.

### HLTH 110 Introduction to Healthcare

3 cr

Provides content for a comprehensive survey and introduction to the U.S. health care system. Topics and discussions will include public health, financing of health care, health insurance, politics, health care providers, and delivery of health care. The course will introduce concepts of regulation, legislation, ethics, and elements of health care reform.

|   |  |
|---|--|
| <p><b>HLTH 150 Introduction to Community and Public Health</b> 3 cr</p> <p>Introduces the fields of Public Health, Health Education and Health Promotion. Topics will include the history of public health, health status, health care philosophy, health and wellness, chronic and infectious diseases, health-related behavior, health theories and program models. Students will learn to use library databases and write a review of health-related literature. A service learning component will allow students to establish projects and relationships that will benefit the community.</p> <p><b>Attributes:</b> Core Self &amp; Society (CSS)</p>                                 | <p><b>HLTH 300 Ethical Issues in Health Care</b> 3 cr</p> <p>Examines the moral traditions and ethical principles relevant to life, and their application in present-day clinical care and biomedical research. Introduces students to the historical, theoretical, and thematic dimensions of health care ethics. Focuses on main ethical terms and concepts, as well as decision-making procedures that students can use to discern and defend moral courses of action in health care.</p> <p><b>Prerequisite:</b> Junior/senior status</p>  |
| <p><b>HLTH 150H Honors: Introduction to Community and Public Health</b> 3 cr</p> <p>Introduces the fields of Public Health, Health Education and Health Promotion. Topics will include the history of public health, health status, health care philosophy, health and wellness, chronic and infectious diseases, health-related behavior, health theories and program models. Students will learn to use library databases and write a review of health-related literature. A service learning component will allow students to establish projects and relationships that will benefit the community.</p> <p><b>Attributes:</b> Core Self &amp; Society (CSS), Honors Program (HONR)</p> | <p><b>HLTH 310 Environmental Health</b> 3 cr</p> <p>Provides a multidisciplinary understanding of the science, practice, laws and policy of environmental health sciences, addressing why risk of disease is modulated by the environment. Topics include types and sources of environmental contaminants, exposure assessment, types of microenvironments, human behavior and time-location-activity patterns, toxicology, the risk assessment paradigm, basics of environmental and occupational epidemiology, and communicating about environmental health sciences.</p> <p><b>Prerequisite:</b> Junior/senior status and BIOL 150 or HLTH 150 or HLTH 150H</p> |
| <p><b>HLTH 195 Special Topics in Health Studies</b> 1-4 cr</p> <p>Provides students with an opportunity to explore different topics and current issues in health or related fields. This course is designed to focus on health topics or issues at the introductory level.</p> <p><b>Repeatable:</b> Unlimited Credits</p>  | <p><b>HLTH 321 Lower Body Assessment</b> 4 cr</p> <p>Explores all aspects of injury evaluation. Injuries to the lower extremity and lumbar spine will be stressed through lecture and lab.</p> <p><b>Prerequisite:</b> BIOL 342</p> <p><b>Corequisite:</b> HLTH 321L</p>   |
| <p><b>HLTH 200 Health Promotion and Planning</b> 3 cr</p> <p>Introduces students to health promotion programs. Students will develop health education materials and teaching strategies for individuals and groups across the life span and in a variety of settings. Students will explore health behavior design theory, health education needs assessments, instructional strategies, learner characteristics, teaching materials and aids, learning environments, and evaluation methods.</p> <p><b>Attributes:</b> Core Self &amp; Society (CSS)</p>   | <p><b>HLTH 322 Upper Body Assessment</b> 4 cr</p> <p>Explores all aspects of injury evaluation. Injuries to the upper extremity and cervical spine will be emphasized through lecture and lab.</p> <p><b>Prerequisite:</b> BIOL 342</p> <p><b>Corequisite:</b> HLTH 322L</p>   |
| <p><b>HLTH 201 Exercise Science</b> 3 cr</p> <p>Facilitates an understanding of exercise based on the principles related to training basics, energy systems, muscular fitness and biomechanics. Students will learn to develop training programs for better physical performance and health.</p> <p><b>Attributes:</b> Core Health and Wellness (CHW)</p>   | <p><b>HLTH 337 Therapeutic Modalities</b> 4 cr</p> <p>Explores the physiology of inflammation and pain in the context of injury. Describes the principles and effects of therapeutic modalities (including thermal, acoustic, electrical, light, and mechanical) and promotes appropriate selection and application of the modalities.</p> <p><b>Prerequisite:</b> BIOL 150 and sophomore, junior, or senior status</p> <p><b>Corequisite:</b> HLTH 337L</p>   |
| <p><b>HLTH 210 Human Growth and Development</b> 3 cr</p> <p>Explores the life cycle from conception to death. Biological, sociological and psychological perspectives will be examined and applied to everyday situations and social issues.</p> <p><b>Attributes:</b> Core Self &amp; Society (CSS)</p>  | <p><b>HLTH 338 Therapeutic Exercise</b> 3 cr</p> <p>Offers students the opportunity to study the techniques and principles involved in rehabilitation of athletic injuries. It includes all aspects of reconditioning exercise and rehabilitation program development.</p> <p><b>Prerequisite:</b> BIOL 342</p>  |
| <p><b>HLTH 210H Honors: Human Growth and Development</b> 3 cr</p> <p>Explores the life cycle from conception to death. Biological, sociological, and psychological perspectives will be examined and applied to everyday situations and social issues.</p> <p><b>Attributes:</b> Core Self &amp; Society (CSS), Honors Program (HONR)</p>   | <p><b>HLTH 339 Therapeutic Exercise with Lab</b> 4 cr</p> <p>Offers students the opportunity to study and practice the techniques and principles involved in rehabilitation of athletic injuries. It includes all aspects of reconditioning exercise and rehabilitation program development.</p> <p><b>Prerequisite:</b> BIOL 342</p> <p><b>Corequisite:</b> HLTH 339L</p>   |
| <p><b>HLTH 295 Special Topics in Health Studies</b> 1-4 cr</p> <p>Provides students with an opportunity to explore different topics and current issues in health or related fields. This course is designed to focus on health topics or issues at the high introductory level.</p> <p><b>Prerequisite:</b> Will vary depending on the course</p> <p><b>Repeatable:</b> Unlimited Credits</p>   | <p><b>HLTH 350 Health Communication</b> 3 cr</p> <p>Examines how communication affects and is intertwined with issues of health, medicine and ethics. Communication will be discussed on a personal, intimate level in the way patients and caregivers interact in the examination and hospital room; at the organizational level, in the way policies and community relations affect how health care is provided and how people feel about providers; and in media campaigns that seek to educate people about health.</p> <p><b>Prerequisite:</b> Junior/senior status</p>   |

|   |  |
|---|--|
| <p><b>HLTH 395 Special Topics in Health Studies</b> 1-4 cr<br/>Provides students with an opportunity to explore different topics and current issues in health or related fields. This course is designed to focus on health topics or issues at the advanced level.<br/><b>Prerequisite:</b> Will vary depending on the course<br/><b>Repeatable:</b> Unlimited Credits</p>   | <p><b>RADT 305 Radiographic Physics</b> 3 cr<br/>Introduces concepts of physics applied to x-ray generating equipment, including radiologic science, atomic structure, structure of matter, radiation quantities and units, fundamentals of electromagnetic radiation, electricity, magnetism, force and energy, electron interactions with matter, and the relationship between magnetism and electricity with focus on application to x-ray circuit components and generators. Successful completion requires a minimum grade of C+. Additional fee required.<br/><b>Prerequisite:</b> Minimum grade of C in MATH 150 and program acceptance<br/><b>Attributes:</b> Additional Fees Apply (FEE)</p>                                    |
| <p><b>HLTH 495 Special Topics in Health Studies</b> 1-4 cr<br/>Provides students with an opportunity to explore different topics and current issues in health or related fields. This course is designed to focus on health topics or issues at the high advanced level.<br/><b>Prerequisite:</b> Will vary depending on course<br/><b>Repeatable:</b> Unlimited Credits</p>  | <p><b>RADT 310 Radiographic Positioning I</b> 4 cr<br/>Provides knowledge required to perform radiographic procedures on the chest, abdomen, upper extremities, lower extremities, shoulder girdle, hip and pelvis, with application to human anatomy. Emphasizes concepts and criteria needed to produce and evaluate quality radiographs. Pathological disorders, classification of diseases, and additive and destructive conditions will also be discussed. Successful completion requires a minimum grade of C+. Additional fee required.<br/><b>Prerequisite:</b> BIOL 342 and BIOL 343 with a minimum grade of C+ and program acceptance<br/><b>Corequisite:</b> RADT 310L<br/><b>Attributes:</b> Additional Fees Apply (FEE)</p> |
| <p><b>HLTH 500 Health Science Independent Study</b> 1-3 cr<br/>Open to junior and seniors who wish to read in a given area or to study a topic in depth. Written reports and frequent conferences with the advisor are required.<br/><b>Prerequisite:</b> Junior/senior status and department approval<br/><b>Repeatable:</b> Maximum of 12 credits</p>   | <p><b>RADT 320 Radiographic Positioning II</b> 4 cr<br/>Provides knowledge required to perform radiographic procedures on the vertebral column, bony thorax, skull, facial bones, and upper and lower gastrointestinal tract, with application to human anatomy. Emphasizes concepts and criteria needed to produce and evaluate quality radiographs. Pathological disorders, classification of diseases, and additive and destructive conditions will also be discussed. Successful completion requires a minimum grade of C+. Additional fee required.<br/><b>Prerequisite:</b> RADT 310 with a minimum grade of C+<br/><b>Corequisite:</b> RADT 320L<br/><b>Attributes:</b> Additional Fees Apply (FEE)</p>                           |
| <p><b>HLTH 510 Health Science Independent Research</b> 1-3 cr<br/>For health science majors who desire to conduct research on a specific topic in a health science field. The research will be under the direction of the instructor and will require scholarly report.<br/><b>Prerequisite:</b> Junior/senior status, department approval<br/><b>Repeatable:</b> Maximum of 12 credits</p>   | <p><b>RADT 330 Radiographic Exposures</b> 3 cr<br/>Introduces the physical principles governing x-rays, x-ray production, and x-ray beam characteristics as they relate to quality, improved patient care and protection. Topics include image production factors, x-ray interactions with matter, fluoroscopic x-ray tubes and image intensifier, principles associated with dynamic imaging, radiographic technique includes x-ray beam filtration, beam restriction, and grid use. Successful completion requires a minimum grade of C+. Additional fee required.<br/><b>Prerequisite:</b> RADT 305 with a minimum grade of C+<br/><b>Attributes:</b> Additional Fees Apply (FEE)</p>   |
| <p><b>HLTH 540 Internship in Community Health Education</b> 3 cr<br/>Provides students with hands-on experience outside of the college in the field of community health and wellness. The student will work with a faculty sponsor and an off-campus supervisor, as appropriate. Repeatable up to 12 credits.<br/><b>Prerequisite:</b> HLTH 200 and junior/senior status and department approval<br/><b>Repeatable:</b> Maximum of 12 credits</p> | <p><b>RADT 340 Digital Imaging, Processing and Quality</b> 3 cr<br/>Introduces components, principles, and operation of digital imaging systems and factors that impact image acquisition, display, and retrieval in radiology, as well as principles of digital system quality assurance and maintenance. Introduces quality assurance, quality control, and quality assessment necessary for the continued production of quality diagnostic radiographic images. Successful completion requires a minimum grade of C+. Additional fee required.<br/><b>Prerequisite:</b> RADT 305 and HLTH 300 or CCAP 300 Ethical Issues in Health Care (all with a minimum grade of C+)<br/><b>Attributes:</b> Additional Fees Apply (FEE)</p>       |
| <p><b>HLTH 590 Health Internship</b> 1-15 cr<br/>Provides students with hands-on experience in health fields. The student will work with a faculty sponsor and an off-campus supervisor, as appropriate.<br/><b>Prerequisite:</b> Junior/senior status and department approval<br/><b>Repeatable:</b> Maximum of 15 credits</p>   |  |

## Athletic Training Courses

**ATTR 220 Introduction to Athletic Training I** 3 cr  
Introduces students to the field of athletic training and sports medicine. Explores fundamental principles of athletic training, which includes terminology, physical conditioning and injury prevention.  
**Corequisite:** ATTR 100

## Radiologic Technology Courses

**RADT 300 Introduction to Radiologic Technology** 2 cr  
Emphasizes critical thinking and patient care principles needed for initial clinical experiences. Topics include physical and psychological needs of the patient and family, routine and emergency patient care procedures, infection control, communication, diversity, patient education, privacy, medico-legal issues, radiation protection, proper body mechanics, safe patient transfer, and contrast media's imaging applications and reactions. Successful completion requires a minimum grade of C+.  
**Prerequisite:** Program acceptance

|  |   |
|--|---|
| <p><b>RADT 350 Radiation Protection and Biology</b> 3 cr</p> <p>Provides an advanced understanding and overview of the principles of radiation protection to allow protection from exposure to radioactivity. Introduces characteristics of radiation as they apply to impacts of radiation on cell biology. Requires application of standards and guidelines for radiation exposure. Successful completion requires a minimum grade of C+. Additional fee required.</p> <p><b>Prerequisite:</b> RADT 330 with a minimum grade of C+</p> <p><b>Attributes:</b> Additional Fees Apply (FEE)</p>   | <p><b>RADT 431 Principles of Computed Tomography I</b> 3 cr</p> <p>Provides fundamentals of computed tomography (CT) including history, equipment and quality control; first of a two-course sequence. Addresses aspects of data acquisition, digital analysis and image processing. Includes 40 hr of clinical observation. Successful completion requires a minimum grade of C. Students may apply for the ARRT certification exam upon successful completion of RADT 431 &amp; RADT 432, plus documented completion of the ARRT Clinical Experience Requirements in Computed Tomography.</p> <p><b>Prerequisite:</b> RADT 340 with a minimum grade of C+</p> |
| <p><b>RADT 355 Clinical Radiography I</b> 2 cr</p> <p>Allows interaction with patients and health care team members in a health care imaging department. This first clinical experience of five, assists students in gaining mastery of techniques utilized in radiography, as assessed through competency examination of specific body areas. Students will practice patient care skills and radiation safety procedures under direct supervision of a registered radiologic technologist. Successful completion requires a minimum grade of C+. Additional fee required.</p> <p><b>Prerequisite:</b> RADT 300 with a minimum grade of C+</p> <p><b>Attributes:</b> Additional Fees Apply (FEE)</p>   | <p><b>RADT 432 Principles of Computed Tomography II</b> 3 cr</p> <p>Focuses on computed tomography (CT) exam procedures, cross-sectional anatomy, pathology and radiation protection; second of a two-course sequence. Addresses aspects of patient care and contrast agents. Includes 40 hrs of clinical observation. Successful completion requires a minimum grade of C. Students may apply for the ARRT certification exam upon successful completion of RADT 431 and RADT 432, plus documented completion of the ARRT Clinical Experience Requirements in Computed Tomography.</p> <p><b>Prerequisite:</b> RADT 431 with a minimum grade of C</p>          |
| <p><b>RADT 365 Clinical Radiography II</b> 3 cr</p> <p>Allows interaction with patients and health care team members in a health care imaging department. This second clinical experience of five, assists students in gaining mastery of techniques utilized in radiography, as assessed through competency examination of specific body areas. Students will practice patient care skills and radiation safety procedures under direct supervision of a registered radiologic technologist. Successful completion requires a minimum grade of C+. Additional fee required.</p> <p><b>Prerequisite:</b> RADT 310 with a minimum grade of C+</p> <p><b>Attributes:</b> Additional Fees Apply (FEE)</p> | <p><b>RADT 433 Clinical Education in CT</b> 4 cr</p> <p>Focuses on clinical application of computed tomography. This clinical experience allows the student to develop practical skills through instruction, application, critique, and evaluation on common computed tomography imaging procedures. Areas of competency include clinical indications, patient preparation and positioning, scanning protocols, radiographic technique, use of contrast media, normal anatomy and pathology and special procedures. Additional fee required.</p> <p><b>Attributes:</b> Additional Fees Apply (FEE)</p>  |
| <p><b>RADT 370 Radiographic Pathology</b> 3 cr</p> <p>Provides an understanding of the clinical manifestations of common pathological conditions as they appear on radiographs. Allows for identification of radiographic features as they relate to characteristics of the disease/disorder, and provides information about how technical values are affected by pathological conditions. Successful completion requires a minimum grade of C+.</p> <p><b>Prerequisite:</b> RADT 330 with a minimum grade of C+</p>   | <p><b>RADT 434 Principles of Mammography I</b> 3 cr</p> <p>Provides fundamentals of mammography including history, equipment and quality control; first of a two-course sequence. Addresses in-depth anatomy, physiology and pathology of the breast. Includes 40 hrs of clinical observation. Successful completion requires a minimum grade of C. Students may apply for ARRT certification exam upon successful completion of RADT 434 and RADT 435, plus documented completion of the ARRT Clinical Experience Requirements in Mammography.</p> <p><b>Prerequisite:</b> RADT 340 with a minimum grade of C+</p>   |
| <p><b>RADT 395 Special Topics in Radiologic Technology</b> 1-4 cr</p> <p>Provides students with an opportunity to explore different topics in radiologic technology. Successful completion requires a minimum grade of C+.</p> <p><b>Prerequisite:</b> Varies by course</p> <p><b>Repeatable:</b> Unlimited Credits</p>  | <p><b>RADT 435 Principals of Mammography II</b> 3 cr</p> <p>Focuses on mammographic procedures, patient care and image evaluation. Second of a two-course sequence. Explores breast ultrasound, digital breast tomosynthesis, biopsies and breast cancer. Includes 50 hrs of clinical practice. Successful completion requires a minimum grade of C. Students may apply for the ARRT certification exam upon successful completion of RADT 434 and 435, plus documented completion of the ARRT Clinical Experience Requirements in Mammography.</p> <p><b>Prerequisite:</b> RADT 434 with a minimum grade of C</p>  |
| <p><b>RADT 420 Advanced Imaging and Pharmacology</b> 3 cr</p> <p>Provides instruction in modalities, interventional radiography, pharmacology and drug administration as applied to advanced radiographic procedures. Utilizes radiographs for specialized study of cross-sectional anatomy relevant to imaging modalities such as CT and MRI. Introduces additional imaging modalities such as CT, MRI, mammography, ultrasound, bone densitometry, nuclear medicine, and PET. Successful completion requires a minimum grade of C+. Additional fee required.</p> <p><b>Prerequisite:</b> RADT 320 with a minimum grade of C+</p> <p><b>Attributes:</b> Additional Fees Apply (FEE)</p>               | <p><b>RADT 436 Clinical Education in Mammography</b> 4 cr</p> <p>Focuses on clinical application of mammography. Emphasizes equipment utilization, exposure techniques, patient care, evaluation of procedures, image evaluation, image quality, radiation safety practices, positioning protocols, image acquisition, radiation protection, breast ultrasound and interventional imaging. Requires clinical exams in mammography. Additional fee required.</p> <p><b>Prerequisite:</b> RADT 435 with a minimum grade of C</p> <p><b>Attributes:</b> Additional Fees Apply (FEE)</p>  |

|   |        |  |        |
|---|--------|--|--------|
| <p><b>RADT 440 Radiographic Critique and Analysis</b></p> <p>Focuses on radiographic image critique from a problem-based perspective. Enhances the student's knowledge of factors that influence the production of radiographic images and the correlation with radiographic critique. Bridges the gap between patient positioning and the resulting radiograph, and focuses on the analysis of image quality. Successful completion requires a minimum grade of C+. Additional fee required.</p> <p><b>Prerequisite:</b> RADT 420 with a minimum grade of C+</p> <p><b>Attributes:</b> Additional Fees Apply (FEE)</p>   | 3 cr   | <p><b>RADT 496 Special Topics Radiography I</b></p> <p>Focuses on fundamentals of a radiographic specialty, including history, instrumentation and quality control, data acquisition, digital analysis and image processing; first of a two-course sequence. Includes 40 hrs of clinical observation. Successful completion of this course with a minimum grade of C may fulfill one of the requirements for applying for the relevant ARRT certification exam.</p> <p><b>Prerequisite:</b> RADT 340 with a minimum grade of C+</p>  | 3 cr   |
| <p><b>RADT 455 Clinical Radiography III</b></p> <p>Allows interaction with patients and health care team members in a health care imaging department. This third clinical experience of five, assists students in gaining mastery of techniques utilized in radiography, as assessed through competency examination of specific body areas. Students will practice patient care skills and radiation safety procedures under direct supervision of a registered radiologic technologist. Successful completion requires a minimum grade of C+. Additional fee required.</p> <p><b>Prerequisite:</b> RADT 365 with a minimum grade of C+</p> <p><b>Attributes:</b> Additional Fees Apply (FEE)</p> | 6 cr   | <p><b>RADT 497 Special Topics Radiography II</b></p> <p>Continues education in a radiographic specialty, including topics such as exam procedures, in-depth anatomy and pathology, specialized protection procedures, and patient care. Includes 40 hrs of clinical observation. Successful completion of this course with a minimum grade of C may fulfill one of the requirements for applying for the relevant ARRT certification exam.</p> <p><b>Prerequisite:</b> Overall 2.3 GPA and RADT 495 with a minimum grade of C+</p>   | 3 cr   |
| <p><b>RADT 465 Clinical Radiography IV</b></p> <p>Allows interaction with patients and health care team members in a health care imaging department. This fourth clinical experience of five, assists students in gaining mastery of techniques utilized in radiography, as assessed through competency examination of specific body areas. Students will practice patient care skills and radiation safety procedures under direct supervision of a registered radiologic technologist. Successful completion requires a minimum grade of C+. Additional fee required.</p> <p><b>Prerequisite:</b> RADT 455 with minimum grade of C+</p> <p><b>Attributes:</b> Additional Fees Apply (FEE)</p>   | 4 cr   | <p><b>RADT 498 Special Topics in Clinical Radiography</b></p> <p>Focuses on clinical application of a radiographic specialty. Areas of competency may include clinical indications, patient preparation and positioning, imaging protocols, radiographic technique, image evaluation, normal anatomy and pathology and special procedures. Successful completion of this course with a minimum grade of C may fulfill one of the requirements for applying for the relevant ARRT certification exam. Additional fee required.</p> <p><b>Prerequisite:</b> Instructor approval</p> <p><b>Attributes:</b> Additional Fees Apply (FEE)</p> <p><b>Repeatable:</b> Maximum of 5 credits</p> | 1-5 cr |
| <p><b>RADT 475 Clinical Radiography V</b></p> <p>Allows interaction with patients and health care team members in a health care imaging department. This fifth clinical experience of five, assists students in gaining mastery of techniques utilized in radiography, as assessed through competency examination of specific body areas. Students will practice patient care skills and radiation safety procedures under direct supervision of a registered radiologic technologist. Successful completion requires a minimum grade of C+. Additional fee required.</p> <p><b>Prerequisite:</b> RADT 465 with minimum grade of C+</p> <p><b>Attributes:</b> Additional Fees Apply (FEE)</p>     | 4 cr   |  |        |
| <p><b>RADT 480 Senior Seminar</b></p> <p>Focuses on factors that impact decision-making related to delivery of health care and radiological practice. Topics addressed include recent scientific findings in related fields of medicine, imaging modalities, and the future of radiographic study. Focuses on the synthesis of professional knowledge, skills and attitudes in preparation for professional practice and lifelong learning. Successful completion requires a minimum grade of C+. Additional fee required.</p> <p><b>Prerequisite:</b> Minimum overall GPA of 2.3 and completion of RADT 455 with a minimum grade of C+</p> <p><b>Attributes:</b> Additional Fees Apply (FEE)</p> | 3 cr   |  |        |
| <p><b>RADT 495 Special Topics in Radiologic Technology</b></p> <p>Provides students with an opportunity to explore different topics in radiologic technology at the advanced level. Successful completion requires a minimum grade of C+.</p> <p><b>Prerequisite:</b> Varies by course</p> <p><b>Repeatable:</b> Maximum of 4 credits</p>   | 1-4 cr |  |        |