

# RADIOLOGY-DIAGNOSTIC (RDI)

School of Medicine

## RDI 413 – Radiological Diagnosis II (Physics of Diagnostic Radiology) (5 units)

*Course Description:* Physics of diagnostic imaging; x-ray production and interaction; image formation; modulation transfer function; fluoroscopy; cine fluoroscopy; stereoscopy; xeroradiography; computerized and geometrical tomography; magnetic resonance and ultrasound. Principles of radiation protection in imaging will be covered.

*Prerequisite(s):* Consent of instructor.

*Learning Activities:* Lecture 49 hour(s), Laboratory 6 hour(s).

*Grade Mode:* Honors/Pass/Fail.

## RDI 414 – Medical Radiation Biology (3 units)

*Course Description:* Medical radiation biology; molecular cellular and organ system response to acute and chronic irradiation; radiation carcinogenesis and genetic effects; radiation risk assessment; diagnostic ultrasound and magnetic resonance imaging health effects. Medical/legal considerations of radiation exposure.

*Prerequisite(s):* Consent of instructor.

*Learning Activities:* Lecture 27 hour(s).

*Grade Mode:* Honors/Pass/Fail.

## RDI 430 – Introduction to Clinical Radiology (3-9 units)

*Course Description:* Introduces students to common radiology tests, including limitations and risks by using ACR Appropriateness Criteria and incorporate patient specific clinical data into ordering and interpreting appropriate imaging tests.

*Prerequisite(s):* Consent of instructor.

*Learning Activities:* Variable.

*Grade Mode:* Honors/Pass/Fail.

## RDI 461 – Advanced Clinical Clerkship in Diagnostic Radiology (3-6 units)

*Course Description:* Work with clinical Radiologists in image interpretation fluoroscopy angiography image-guided intervention cardiac stress testing radionuclide therapy. Daily conferences in Radiology Diagnosis and Therapy Health Physics Radiation Safety. Prepare two clinical cases for in-class presentation. Assigned readings.

*Prerequisite(s):* Consent of instructor; satisfactory completion of second-year medical school curriculum and of third-year clerkships in Internal Medicine and General Surgery.

*Learning Activities:* Clinical Activity 35 hour(s), Conference 4 hour(s), Discussion/Laboratory 1 hour(s).

*Enrollment Restriction(s):* Restricted to eight students per rotation; open to visiting medical students from accredited programs.

*Repeat Credit:* May be repeated.

*Grade Mode:* Honors/Pass/Fail.

## RDI 462 – Diagnostic Imaging of Acquired & Congenital Heart Disease (2 units)

*Course Description:* Main emphasis on radiology of acquired and congenital heart disease, but also on magnetic resonance, nuclear medicine, and echocardiography of heart diseases.

*Prerequisite(s):* RDI 461 (can be concurrent); fourth-year medical student in good academic standing.

*Learning Activities:* Lecture/Discussion 5 hour(s).

*Grade Mode:* Honors/Pass/Fail.

## RDI 473 – Advanced Clinical Clerkship in Neuroradiology (3-6 units)

*Course Description:* Work with Neuroradiologists in image interpretation of CT, MRI, and fluoroscopy. Opportunity to participate in assessment of Neurointerventional patients, and to observe Neurointerventional procedures. Daily conferences in Neuroimaging, General Radiology, Health Physics, and Radiology Safety. Assigned readings.

*Prerequisite(s):* Fourth-year medical student with interest in Diagnostic Radiology, Neuroradiology, Neurology, Neurosurgery, Psychiatry, Psychology, or related field; satisfactory completion of RDI 461, or the equivalent, is strongly encouraged.

*Learning Activities:* Clinical Activity 35 hour(s), Conference 4 hour(s), Independent Study 1 hour(s), Variable 9-18 hour(s).

*Enrollment Restriction(s):* Restricted to one student per two-week or four-week rotation.

*Credit Limitation(s):* Credit limited to 3 units for two weeks; 6 units for four weeks.

*Repeat Credit:* May be repeated.

*Grade Mode:* Honors/Pass/Fail.

## RDI 474 – Advanced Clinical Clerkship in Pediatric Radiology (3-6 units)

*Course Description:* Participation in the radiological care of Pediatric patients; evaluate the patient receiving the radiographic study, including pertinent historical/physical findings. Student expected to write up case files on interesting cases encountered during their rotation.

*Prerequisite(s):* Fourth-year medical students with interest in Radiology and/or Pediatrics; interested third-year medical students who have successfully completed Pediatrics clinical clerkships may enroll, given availability and consent of the instructor of record; prior completion of PDI 461, or the equivalent, encouraged.

*Learning Activities:* Clinical Activity 30 hour(s), Conference 5 hour(s), Film Viewing 3 hour(s), Independent Study 2 hour(s).

*Enrollment Restriction(s):* Restricted to two students per two-week or four-week rotation.

*Credit Limitation(s):* Credit limited to 3 units for two weeks; 6 units for four weeks.

*Repeat Credit:* May be repeated.

*Grade Mode:* Honors/Pass/Fail.

### **RDI 475 – Advanced Clinical Clerkship in Musculoskeletal Radiology (MSK) (3-6 units)**

*Course Description:* Work with Musculoskeletal Radiologists in interpretation of CT, MRI, radiography, and fluoroscopy. Opportunity to assess patients for, and to observe image-guided procedures. Daily conferences in Musculoskeletal Imaging, General Radiology, Health Physics, and Radiology Safety. Assigned readings.

*Prerequisite(s):* Fourth-year medical student with interest in Musculoskeletal Radiology, Orthopedic Surgery, Sports Medicine, PMNR, or related field; satisfactory completion of RDI 461, or the equivalent, is strongly encouraged.

*Learning Activities:* Clinical Activity 35 hour(s), Conference 4 hour(s), Discussion/Laboratory 1 hour(s), Variable 9-18 hour(s).

*Enrollment Restriction(s):* Restricted to one student per two-week or four-week rotation.

*Credit Limitation(s):* Credit limited to 3 units for two weeks; 6 units for four weeks.

*Repeat Credit:* May be repeated.

*Grade Mode:* Honors/Pass/Fail.

### **RDI 476 – Advanced Clinical Clerkship Vascular/Interventional Radiology (IR) (3-6 units)**

*Course Description:* Medical student will work with Vascular/Interventional Radiologists in the evaluation of patients for interventional procedures. There will be opportunities to Daily conferences in Neuroimaging, General Radiology, Health Physics, and Radiology Safety. Assigned readings.

*Prerequisite(s):* Fourth-year medical student with interest in Diagnostic Radiology, Vascular/Interventional Radiology, Cardiovascular Imaging, Cardiology, Cardiovascular Surgery, Surgical Oncology, General Surgery, or related field; satisfactory completion of RDI 461, or the equivalent, is strongly encouraged.

*Learning Activities:* Clinical Activity 35 hour(s), Conference 4 hour(s), Discussion/Laboratory 1 hour(s), Variable 9-18 hour(s).

*Enrollment Restriction(s):* Restricted to one student per two-week or four-week rotation.

*Credit Limitation(s):* Credit limited to 3 units for two weeks; 6 units for four weeks.

*Repeat Credit:* May be repeated.

*Grade Mode:* Honors/Pass/Fail.

### **RDI 477 – Advanced Clinical Clerkship in Ultrasound Radiology (3-6 units)**

*Course Description:* Participation as an active team member on a busy clinical ultrasound service.

*Prerequisite(s):* Fourth-year medical student with interest in Radiology, OB/GYN, or in other medical or surgical subspecialties employing ultrasound in their clinical practice; prior completion of RDI 461, or the equivalent, is encouraged.

*Learning Activities:* Clinical Activity 30 hour(s), Conference 5 hour(s), Film Viewing 3 hour(s), Variable 9-18 hour(s).

*Enrollment Restriction(s):* Restricted to two students per two-week or four-week rotation.

*Repeat Credit:* May be repeated.

*Grade Mode:* Honors/Pass/Fail.

### **RDI 478 – Advanced Clinical Clerkship Abdominal Imaging (3-6 units)**

*Course Description:* Work with clinical Radiologists on abdominal and pelvic CT, MR, ultrasound, digital radiography, gastrointestinal and genitourinary procedures, image-guided intervention. Offered as a two-week rotation for third-year medical students and a two/four-week rotation for fourth-year medical students.

*Learning Activities:* Clinical Activity 35 hour(s), Conference 4 hour(s), Discussion/Laboratory 1 hour(s), Variable 9-18 hour(s).

*Enrollment Restriction(s):* Restricted to one student per two-week or four-week rotation.

*Credit Limitation(s):* Credit limited to 3 units for two weeks; 6 units for four weeks.

*Repeat Credit:* May be repeated.

*Grade Mode:* Honors/Pass/Fail.

### **RDI 479 – Specialty Externship in Radiology (3-16 units)**

*Course Description:* Externship provides in-depth exposure to one of a variety of sub-specialties in Radiology.

*Learning Activities:* Clinical Activity 25 hour(s), Discussion 10 hour(s).

*Repeat Credit:* May be repeated.

*Grade Mode:* Honors/Pass/Fail.

### **RDI 480 – Away Acting Internship in Radiology (3-6 units)**

*Course Description:* Away Acting Internship rotation for Radiology and Nuclear Medicine.

*Prerequisite(s):* Consent of instructor.

*Learning Activities:* Clinical Activity 40 hour(s).

*Repeat Credit:* May be repeated.

*Grade Mode:* Honors/Pass/Fail.

### **RDI 498 – Group Study in Diagnostic Radiology (1-12 units)**

*Course Description:* Group study in diagnostic radiology.

*Prerequisite(s):* Consent of instructor.

*Learning Activities:* Variable.

*Grade Mode:* Honors/Pass/Fail.

### **RDI 499 – Research in Diagnostic Radiology (1-12 units)**

*Course Description:* Approved for graduate degree credit.

*Prerequisite(s):* Consent of instructor.

*Learning Activities:* Variable.

*Repeat Credit:* May be repeated.

*Grade Mode:* Honors/Pass/Fail.