RADIOLOGY (RADIOL)

RADIOL/B M E/MED PHYS/PHMCOL-M/PHYSICS 619 — MICROSCOPY OF LIFE

3 credits.

Survey of state of the art microscopic, cellular and molecular imaging techniques, beginning with subcellular microscopy and finishing with whole animal imaging.

Requisites: PHYSICS 104, 202, 208, or 248 or PHYSICS/MED PHYS 265

Course Designation: Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No Last Taught: Fall 2022

RADIOL 711 – JOURNAL CLUB

1 credit.

Student Seminar and Journal club for second year students in the Medical Scientist Training Program.

Requisites: Graduate/professional standing

 $\textbf{Course Designation:} \ \mathsf{Grad} \ 50\% \ \mathsf{-} \ \mathsf{Counts} \ \mathsf{toward} \ 50\% \ \mathsf{graduate}$

coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2017

RADIOL 813 - RADIOLOGY CLERKSHIP

1-2 credits.

Introduction to principles and technology of diagnostic radiology. Emphasis on fundamental interpretation skills in chest, abdominal and bone films, and in cross-sectional anatomy. Discussions focused on appropriate, cost efficient radiologic workup and image guided surgery.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate

coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Fall 2018

RADIOL 910 – INDEPENDENT READING AND RESEARCH IN RADIOLOGY

2-8 credits.

Independent research under the supervision of faculty in the Department of Radiology. Student's research projects are individualized to meet individual student research goals within the context of faculty research needs.

Requisites: Graduate/professional standing

 $\textbf{Course Designation:} \ \mathsf{Grad} \ 50\% \ \mathsf{-} \ \mathsf{Counts} \ \mathsf{toward} \ 50\% \ \mathsf{graduate}$

coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2023

RADIOL 911 – IMAGING AND EMBRYOLOGY: THE BASIC SCIENCE OF FETAL DYSMORPHOGENESIS

2 credits.

The diagnosis and management of congenital abnormality requires an understanding of the basic principles of embryology, imaging, and genetics. Replicating how patients enter the medical system, the didactic path begins with ultrasound diagnosis of fetal abnormality. The embryological basis of the fetal malformations will be examined. From this center, exposure to advanced diagnostics, such as fetal echocardiography, fetal MRI, and genetic testing and counseling. Topics extend to early postnatal care (pediatric genetics and pediatric radiology). Participate in the Meriter Perinatal Conference, learn about genetic approaches to the diagnosis of fetal malformation syndromes, and learn the rudiments of an obstetrical sonogram.

Requisites: MED SC-M 810, 811, 812, and 813

 $\textbf{Course Designation:} \ \mathsf{Grad}\ \mathsf{50\%}\ \mathsf{-}\ \mathsf{Counts}\ \mathsf{toward}\ \mathsf{50\%}\ \mathsf{graduate}$

coursework requirement Repeatable for Credit: No Last Taught: Spring 2023

RADIOL 914 – PHYSICIAN FINANCIAL WELLNESS

1 credit.

Graduating medical students are faced with a wide array of financial planning and wellness challenges. The median medical student debt has continued to increase, and there is a corresponding proliferation of federal repayment and forgiveness options. Other financial planning needs, such as budgeting and insurance, also arise during this time of transition. A unique opportunity to learn key concepts around budgeting, investing, insurance, and negotiation through independent and group learning experiences. This format allows for better analysis on financial decisions and to understand the impact of these decisions on both current and future financial health and wellness.

Requisites: MED SC-M 810, 811, 812, and 813

Course Designation: Grad 50% - Counts toward 50% graduate

coursework requirement **Repeatable for Credit:** No **Last Taught:** Spring 2023

RADIOL 920 – DIAGNOSTIC RADIOLOGY ELECTIVE

2 credits.

Familiarizes the student with the various imaging and therapeutic procedures that are performed in radiology. In addition to learning about the strengths and limitations of different imaging studies, the student should attempt to relate abnormal radiologic findings to pathophysiology with logic and confidence. Students will be given the opportunity to rotate through the section of their choice for 2 weeks in the Radiology department and are able to tailor their reading room experiences to their interests. They will engage in hands on learning activities, interactive assignments, and learn to communicate in interdisciplinary conversations about patient care when it comes to best practices with radiology.

Requisites: MED SC-M 810, 811, 812, and 813

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2023

RADIOL 923 – CLINICAL NUCLEAR MEDICINE ELECTIVE

2 credits.

Work directly with faculty in the Nuclear Medicine section of the Department of Radiology. Broad-based experience in a variety of procedures routinely performed by the nuclear medicine service, including nuclear cardiology. Practice in building and presenting a case report.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate

coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2023

RADIOL 924 – GENERAL RADIOLOGY ELECTIVE

2-4 credits.

Elective opportunity to study basic radiological studies and modalities. Gain proficiency in identifying normal structures and can't miss diagnoses on a chest radiograph and abdominal films as well as determining indications for advanced studies (computed tomography CT, magnetic resonance imaging MRI, ultrasound US, angiograms). Practice in building and presenting a case report.

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate

coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2023

RADIOL 926 - INTERVENTIONAL RADIOLOGY ELECTIVE

2-4 credits.

High-level procedural experience on a clinical interventional radiology service. Interventional radiology uniquely blends the concepts of imaging anatomy and pathophysiology to provide minimally invasive solutions to patients. Hone clinical and procedural skills while being exposed to a rich background curriculum with the goal of case report publication.

Requisites: Graduate/professional standing

 $\textbf{Course Designation:} \ \mathsf{Grad} \ 50\% \ \mathsf{-} \ \mathsf{Counts} \ \mathsf{toward} \ 50\% \ \mathsf{graduate}$

coursework requirement **Repeatable for Credit:** No **Last Taught:** Spring 2023

RADIOL 928 - SCREENING IN RADIOLOGY

2 credits.

Clinical experience on diagnostic radiology service. Apply population health and epidemiology principles to screening exam selection in radiology. Participate in interdisciplinary conversations surrounding patient care. Practice in patient-centered communication and in creating a case report.

Requisites: MED SC-M 810, 812, 813, and 911

 $\textbf{Course Designation:} \ \mathsf{Grad} \ 50\% \ \mathsf{-} \ \mathsf{Counts} \ \mathsf{toward} \ 50\% \ \mathsf{graduate}$

coursework requirement Repeatable for Credit: No Last Taught: Spring 2023