

RDLGY 7064 Course Syllabus

Course Title: Neuroradiology

Course Number: RDLGY 7064

Course Dates:

Credits: 2 Credits

Course Times: M-F 8:00 am – 5:00 pm

Conference Times: Daily Noon Conference

Classroom: Radiology Imaging Consultation Room (NEURO)

Professor: Miriam Peckham M.D.

Office Phone: 801-581-7553

Email: miriam.peckham@hsc.utah.edu

Med Student Coordinator: Gina Burt

Email: gina.burt@hsc.utah.edu

Course Description

Medical students will perform a specialty rotation in Neuroradiology that encompasses the multiple different imaging modalities and procedures integral to brain, spine, head, and neck imaging. The primary objective is to have the student finish the rotation with a solid foundation in neuroimaging and its clinical correlates as well as a good understanding of radiology as a potential career choice. Students not interested in a radiology career, but who are interested in associated neurological specialties and desire a solid exposure to neuroimaging are also welcome to apply. The student is expected to participate in the daily work including designation of appropriate study protocols, review of selected studies, and development of a differential diagnosis list. Course evaluation will be based on daily participation, a computer based written examination, and an optional oral presentation.

Course Objectives

After successfully completing this course you will be able to:

- Discuss the strengths and weakness of various imaging modalities in neuroradiology, including CT, MRI, and fluoroscopy.
- Learn how to utilize appropriateness criteria as outlined by the ACR (American College of Radiology) to select the most appropriate imaging exam for a variety of clinical scenarios.
- Obtain a rudimentary knowledge of brain, spine, head, and neck anatomy on various imaging modalities.
- Learn how to recognize fundamental disorders of the brain, spine, head, and neck on imaging studies.

Reading Resources

- Book: Learning Radiology Recognizing the Basics 4th Edition by William Herring MD Review Chapter 27 pertaining to neuro imaging. (Available online through Marriot Library)
- Book: Lumbar Punctures in 3D by Justin Cramer MD, Edward Quigley MD, Troy Hutchins MD, Lubdha Shah MD <https://books.apple.com/us/book/lumbar-punctures-in-3d/id1098471871>
- Journal Article from RadioGraphics: *CT for Treatment Selection in Acute Ischemic Stroke: A Code Stroke Primer* <https://pubs.rsna.org/doi/pdf/10.1148/rg.2019190142>

Case Conference Participation - 12:00 PM Daily

Students are expected to participate in case conferences which are held at noon via Zoom or in-person.

Instructions:

- 1) Join Zoom Meeting link <http://utah.zoom.us/j/92431501169>
- 2) Meeting ID: 924 3150 1169

Conference Schedule

Date	Department Presenting	Presenter

Tips for Success

1. **Participate.** This class requires engagement and having discussions with the reading room mentors is a critical part of the course. You can learn a great deal from discussing your questions, ideas, and perspectives with your mentors. Participation can also help you articulate your thoughts and develop critical thinking skills.
2. **Manage your time.** Make time for self-study and online learning each week. If there are opportunities to job shadow on Spine procedure Fridays, plan ahead and be on time for scheduled procedures. Talk to course director about scheduling these opportunities.
3. **Login regularly.** Review course book and other optional reading assignments to gain knowledge in Neuro imaging.
4. **Test your knowledge.** Review the cases with the resident, fellow or faculty to test your knowledge.
5. **Communicate.** If you need help with accessing course material, questions with course schedule, connecting to online conferences, or other related course matters, reach out to MS Coordinator for support.

Course Grade and Evaluation

Each student will be evaluated by their mentors at the end of this 2-week elective course with a course grade of Pass, Fail, or Incomplete. Mentors will be watching for participation, engagement, attendance, professionalism, and student's ability to share gained knowledge through this self-paced course.