

**Course: Radiology Selective****Course Number: RAD 1901**

Department: Radiology

Course Director: Kristen Bishop, MD

Course Coordinator: Alejandro Calderon

Hospital: Parkland Memorial Hospital, Children's Medical Center, Zale Lipshy, University Hospital

Periods Offered: 1-3

Length: 4 weeks

Max # of Students: 4

First Day Contact: Alejandro Calderon

First Contact Time: 8:00 a.m.

First Day Location: Designated Clinical site

Prerequisites: Completion of RAD 2101, must be applying to radiology residency and have course director approval.

I. Course Description

The student will gain further experience in radiology by functioning at the level of a beginning radiology resident under the direct supervision of attending faculty members. The student will choose a subspecialty division in radiology in which to concentrate during the month and will work closely with faculty in that division.

The student will have access to PACS computers and dictate draft reports of imaging studies to be signed by supervising faculty. The student may also assist faculty with patient work-up and procedures if procedures are covered by the chosen subspecialty.

Students will attend resident conferences during the month and should attend at least one tumor board covered by the chosen subspecialty each week. Students will also attend Radiology Grand Rounds (usually once or twice per month) and may be required to attend journal club (at the discretion of the division director).

At the end of the month, students will present a 10 minute clinical presentation of a case seen on service using appropriate current references from the medical literature at a subspecialty divisional meeting. Student performance will be assessed by evaluations submitted by supervising faculty in the chosen subspecialty and compiled by the course director.

Goals	Objectives	Assessment methods ( <i>examples</i> )
<b>Patient Care:</b> <i>To provide patient care that is compassionate, appropriate, and effective for the treatment of health problems.</i>	1. Create clear, accurate, and concise draft imaging reports for subsequent sign off by supervising faculty 2. Improve procedural skills by assisting with image guided procedures	<ul style="list-style-type: none"> <li>• <i>Quality of written reports</i></li> <li>• <i>Direct observation by supervising faculty</i></li> <li>• <i>Written evaluations</i></li> </ul>

<p><b>Medical knowledge:</b> <i>To demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care.</i></p>	<ol style="list-style-type: none"> <li>1. Demonstrate familiarity with normal imaging anatomy in the selected radiologic subspecialty area</li> <li>2. Recognize common disease states by imaging appearance in the selected radiologic subspecialty area</li> </ol>	<ul style="list-style-type: none"> <li>• <i>Formal end-of course presentation</i></li> <li>• <i>Direct observation by supervising faculty</i></li> <li>• <i>Written evaluations</i></li> </ul>
<p><b>Interpersonal and communication skills:</b> <i>The students will effectively exchange information with patients, families, consultants and the team, including nurses, faculty, residents and ancillary staff.</i></p>	<ol style="list-style-type: none"> <li>1. Assist with assessment of patients undergoing diagnostic imaging exams when there are concerns or patient has an adverse reaction</li> <li>2. Assist with assessment of patients undergoing image guided procedures</li> </ol>	<ul style="list-style-type: none"> <li>• <i>Observations of faculty and staff</i></li> <li>• <i>Written evaluations</i></li> </ul>
<p><b>Practice Based learning and Improvement:</b> <i>Students will demonstrate the ability to assimilate scientific evidence and improve patient care practices.</i></p>	<ol style="list-style-type: none"> <li>1. Review radiology literature and compile information to be used in oral presentation format</li> <li>2. Critically assess current radiology literature for the purposes of group discussion and adoption to current clinical practices</li> </ol>	<ul style="list-style-type: none"> <li>• <i>Formal end of course presentation</i></li> <li>• <i>Journal club (if required by division)</i></li> </ul>
<p><b>Professionalism:</b> <i>Students must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population</i></p>	<ol style="list-style-type: none"> <li>1. Exhibit professional behavior and appearance while on service including when interacting with residents, attendings, technologists, patients, and support personnel.</li> </ol>	<ul style="list-style-type: none"> <li>• <i>Observations of faculty and staff</i></li> <li>• <i>Written evaluations</i></li> </ul>
<p><b>Systems based practice:</b> <i>1. Know how radiology fits into the larger system of health care.</i> <i>2. Work with the team and patients to optimize use of system resources</i></p>	<ol style="list-style-type: none"> <li>1. Participate in the protocoling of diagnostic imaging studies and image guided procedures</li> <li>2. Be familiar with ACR Appropriateness Criteria, particularly with regard to the chosen subspecialty</li> </ol>	<ul style="list-style-type: none"> <li>• <i>Observations of faculty and staff</i></li> <li>• <i>Written evaluations</i></li> </ul>

### III. Methods of Instruction:

- Didactic:** Students will attend resident conferences 11:30-1:00 on most days with extended hours one Tuesday per month. Students will attend Radiology Clinical Grand Rounds (usually 1-2x per month).
- Clinical:** At least 30 days prior to rotation students will choose a subspecialty division to spend the month and make arrangements with the Division Director. Possible choices include: Abdominal Imaging, Breast Imaging, Musculoskeletal Imaging, Neuro Imaging,

Nuclear Medicine, Pediatric Imaging, Thoracic Imaging. Students should expect to function similar to a beginning radiology resident, with a similar level of engagement.

#### IV. Overview of student responsibilities

##### A. **PowerPoint Presentation Project:**

Students will choose a case seen on clinical service to present to the subspecialty division. Students must obtain de-identified, HIPAA-compliant images and present a PowerPoint presentation (approximately 10 minutes) with appropriate references from the literature.

##### B. **Attendance**

Students are expected to be present for clinical services Monday-Friday 8:00-5:00 (except university-wide holidays). Per UTSW requirements for attendance for MS-4 clinical electives, the student may not miss more than 4 days of EXCUSED absences.

1. Examples of appropriate reasons for excused absences include residency interviews or illness. Students should contact Clerkship Coordinator or the Education Office (RADEducation@UTSouthwestern.edu) with expected dates of excused absences at least one (2) weeks prior to the start of the course. In the event of illness or an unexpected absence (or missed lecture) arises, promptly contact the Clerkship Coordinator or the Radiology Education Office. It is also appropriate to communicate expected absences to the appropriate subspecialty division.

Unexcused absences will be reflected in the student's final grade for the course.

##### C. **Dress Attire/Professionalism**

1. Professional dress (business casual is acceptable) with white coat and UTSW ID badge is expected, as the student will be rotating on the clinical services and will interact with faculty, residents, other clinicians, technologists, and patients.
2. If the student is expected to participate in procedures by the assigned division, he/she will need to wear clean scrubs from the scrub cabinet, along with a white coat and UTSW ID badge.
3. Please have cell phones put away during readout.

#### IV. Method of evaluation of students and requirements:

- A. Students will be evaluated by their supervising subspecialty division faculty members. Written evaluations will be completed by the faculty covering the student's knowledge of radiology, image interpretation skills, procedural skills (if applicable), quality of written reports, interpersonal communication skills, attendance at required teaching conferences, tumor boards, grand rounds, and journal clubs (if applicable), and quality of final presentation to the divisional faculty. Based on written evaluations, consensus of the division members (with input from the course director if necessary), and student fulfillment of course objectives and expectations, a grade of Honors, Pass, or Fail will be assigned.