# RAD 4001: DIAGNOSTIC RADIOLOGY

2021-2022

# Add/Drop Code Contact: Verlincia.D. Williams@uth.tmc.edu

| Faculty In Charge Of Course: | Directors: Manickam Kumaravel M.D. Pritish Bawa, M.D.  |
|------------------------------|--|
| Participating Faculty:       | Radiology faculty at UT Medical School, M.D. Anderson Cancer Center, and LBJ                     |
| Location:                    | UT Medical School and Memorial Hermann Hospital; M.D. Anderson Cancer Center Dept. of Diagnostic |
|                              | Imaging; LBJ   |
| Offered:                     | Blocks 1-13, except 12   |
| Max. # Students/Period:      | 10   |

## **Course Objective**

This course will give medical students a comprehensive overview of the different subspecialties of radiology. In this elective, all students will be exposed to "core" lectures, case presentations, and clinical discussions. During clinical rotations, they observe faculty, fellows, and residents in subspecialty areas of radiology. Didactic lecture sessions are scheduled daily to give the students an in-depth understanding of the wide scope of radiology, including pediatric radiology, neuroradiology, nuclear medicine, thoracic radiology, emergency radiology, interventional radiology, body imaging, women's imaging, and musculoskeletal radiology. Students will rotate at the UT Medical School, Memorial Hermann Hospital systems, M.D. Anderson Cancer Center, and at LBJ in the Department of Imaging. At the end of the rotation, students will present a case presentation for their final grade based on a subspecialty in radiology.

## Areas of Knowledge to be Covered and Skills Acquired:

- Comprehensive knowledge of current diagnostic imaging and procedures, their indication, and contraindication.
- Have a logical approach to analyzing images in order to recognize basic anatomical structures and pathophysiology.
- Understand the importance of clinical information and the rationale for radiologic preparation routines.
- Be informed of appropriateness criteria to request exams.
- Role of radiology in a health care team-based environment
- Have an understanding of what can and cannot be accomplished through imaging.
- Awareness of the cost involved in imaging.

#### **Activities of the Elective:**

#### Number Of New Patients/Student/Week:

Not Applicable

#### Responsibilities Of Student For Assigned Patients:

|                                       | Does history/physical:                              | Yes      |
|---------------------------------------|---|----------|
|                                       | Follows patients, with appropriate notes as needed: | Yes      |
| Does student see ambulatory patients: |   | Yes      |
|                                       | Performs or observes procedures:                    | Observes |

#### **Scheduled Duties of Student:**

| Presents patients to preceptor or attending physician: | Yes   |
|--|---|
| Weekly schedule of required teaching sessions:         | Students will rotate 2 weeks at Memorial Hermann Health System, 1 week at MD            |
|  | Anderson Cancer Center, and 1 week at LBJ. The student will attend lectures sessions    |
|  | covered during the rotation, observe procedures in clinical areas each day, participate |
|  | with radiology residents, fellows and faculty in read-out teaching sessions.            |

## Describe Optional Rounds And Activities, If Any:

The student has access to PACS based teaching cases, a basic radiology textbook, and radiology library resources at UT McGovern medical school, Memorial Hermann, MD Anderson, and LBJ locations.

# Other Required Activities:

| Reading recommendation         | Learning Radiology, by William Herring, M.D. 4th ed. (available online - TMC library)        |
|--------------------------------|--|
| Presenting a case presentation | Yes  |
| Completion of case modules     | Each student will complete 8 radiology cases online in Aquifer before the end of the course. |

## Who Evaluates Students:

Assigned faculty

## How the student will be evaluated:

This elective is graded as Honors, High Pass, Pass or Fail. The student's overall grade will be contingent upon, their attendance and participation in didactic sessions, completion of the Aquifer online cases, participation at their clinical assignments and the final case presentation. The case presentation will be graded by an assigned faculty. The student will receive a grade based on the student's demonstration of accomplishing the educational objectives listed below.

## **GRADING BREAK-DOWN**

| 50% | Case          | Each student will present a case presentation for their final grade based on a subspecialty of interest in radiology. |
|-----|---------------|---|
|     | Presentation  |   |
| 10% | Aquifer Cases | Each student will complete 8 radiology cases online in Aquifer before the end of the course.                          |
| 20% | Clinical      | Each student will rotate 2 weeks at Memorial Hermann Health System, 1 week at LBJ and 1 week at MD Anderson           |
|     | Rotation      | Cancer Center   |
| 20% | Lecture       | Each student will attend 20 didactic lectures via a classroom setting or watch online as assigned by the course       |
|     | Attendance    | coordinator.  |
|     | Total         | 100%  |

Honors (H): >89% -100% High Pass (HP): >78% - 88%

Pass (P): 69% - 77% Fail (F): <68%

## IF 5 OR FEWER STUDENTS ARE ENROLLED IN THE COURSE:

When there is an enrollment of 5 or fewer students, individual arrangements will be made for students to rotate through the subspecialty areas in radiology. Online lectures will be provided to students. The students will still rotate through MD Anderson and LBJ for their assigned week and present a case to the faculty based on a subspecialty in radiology during the last week of their rotation.