

Elective Description

Campus: Southwest (Bismarck)

Department: Radiology

Elective/Experience Title: Diagnostic Radiology

Course Number: RAD 9101-01

Location of Elective: Sanford Health – Bismarck, ND

Preceptor(s): Bruce Gardner, MD; Ryan Hegge, MD; Matthew Iwamoto, MD; Michael McIntee, MD; Andrew Miller, MD; John Miller, MD; Joshua Rampton, MD; Brian Rau, MD; Christina Tello-Skjerseth, MD

Period(s) Offered: All periods

Course Prerequisites:

Number of students per period: 1-2

Revised Curriculum Phase(s): 2 & 3

Purpose: To gain education and clinical experience in the practice of general radiology.

Objectives: Following successful completion of this elective, the student will be able to:

1. List the major modalities of imaging studies and summarize the basic concepts of each (*Competency 2.6*).
2. Identify relevant anatomy in imaging studies (*Competency 2.3*).
3. Generate a short differential of major pathology found on imaging studies (*Competency 3.3*).
4. Demonstrate imaging decision-making in a clinical context (*Competency 3.2, 3.3*).
5. Execute efficient Navigation of modern PACS systems and workstations (*Competency 1.7*).

Instructional Activities: During this elective, the student will be involved in/experience:

1. Reading of standard text books and primary literature to expand understanding of disease presentation through imaging.
2. Assisting the preceptor with data gathering available in the imaging or clinical records.
3. Limited communication of findings to relevant colleagues.
4. Manipulation of images in a PACS environment.
5. A standardized department-authored 50 question test on the last Friday of the Diagnostic Radiology rotation.

Criteria for Grading: During and following this elective, the preceptor will:

1. Utilize the standardized UNDSMHS senior elective evaluation form.
2. By direct observation and discussion with the student assess the student's visual awareness of significant pathology on studies via case-to-case reviews of images (*Objective 2, 3, 4, 5*).
3. Evaluate the communication skills of the student through observation of descriptions of pathologic imaging findings (*Objective 2, 3, 4*).
4. Discern how well the student utilizes imaging resources in clinical contexts by discussion of reviewed cases (*Objective 1, 3, 4*).
5. Assess appropriateness of differential diagnosis based on presented pathology seen during workstation reviews (*Objective 2, 3, 5*).
6. Evaluate the student's radiology knowledge by evaluating their performance on a multiple choice exam (*Objectives 1-4*).
 - a. An exam score of 70% is required to pass the rotation. A score of 94% or greater will be required to be considered for rotation honors.
 - b. Two attempts will be allowed to pass the exam. If the student does not pass after 2 attempts they will be no further re-examination or remediation.