

**CATEGORICAL COURSE CURRICULUM
2 YEAR COURSE**

CHEST RADIOLOGY

Lecture 1	Chest Radiology – anatomic considerations
Lecture 2 with	Radiographic Signs in Diagnosis of Chest Disease emphasis on Signs of Lobar Atelectasis
Lecture 3	Radiographic Assessment of Chest Trauma
Lecture 4	Radiographic Evaluation of Lung Cancer
Lecture 5	Sarcoid
Lecture 6	Immunologic Lung Disease
Lecture 7	Pulmonary edema
Lecture 8	Mycobacterial Infections
Lecture 9	Fungal Infections
Lecture 10 chest CT	Diffuse lung disease including high resolution
Lecture 11	Inhalational lung diseases
Lecture 12 host	Pulmonary infections in the immune compromised
Lecture 13	Radiology of COPD and emphysema
Lecture 14	Radiology of the pleura, diaphragm, and chest wall
Lecture 15	Radiology of the mediastinum

Goals and Objectives – Chest Radiology (First year)

- I. Patient Care
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
 - (a) Shows ability to interact with clinicians when reviewing chest imaging studies.
 - (b) Shows ability to recommend additional imaging studies as appropriate to better assess chest x-ray findings (e.g. CT/US/MRI).
 - (c) Shows ability to use PACS and hospital information systems

- II. Medical Knowledge
 - (a) Demonstrates knowledge of normal/abnormal anatomy as seen on Chest x-ray/chest CT.
 - (b) Shows ability to recognize and describe common medical conditions as depicted on chest imaging studies.

- I. Practice Based Learning and Improvement
 - (a) Shows evidence of independent study using textbooks from suggested reading list.
 - (b) Demonstrates appropriate follow up of interesting cases.
 - (c) Prepares teaching file of interesting cases.

- I. Interpersonal Skills

Residents must demonstrate skills to:

 - a) Interact with x-ray technologists, medical students, fellow residents, and attending radiologists.
 - b) Interact with clinicians when reviewing cases involving chest imaging studies.
 - c) Interact with patients/family when performing invasive procedures such as lung biopsy, thoracentesis.

- I. Professionalism
 - VI) Residents must demonstrate ability to interact with patient/patient's family/clinician_when discussing significance of x-ray findings and their impact on patient care including what imaging studies may or may not be appropriate.

- VI.. Systems Based Practice
 - a) Shows ability to interact with clinicians regarding cost effective and streamlined patient evaluation for differing clinical entities.
 - b) Able and willing to participate in clinical conferences in which imaging studies used to guide patient care/evaluation.

Goals and Objectives – Chest Radiology (Second Year)

- VI) I. Patient Care

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

 - a) Shows ability to interact with clinicians when reviewing chest imaging studies.
 - b) Shows ability to recommend additional imaging studies as appropriate to better assess chest x-ray findings (e.g. CT/US/MRI).
 - c) Shows ability to use PACS and hospital information systems
 - d) Is able and willing to assist lower level residents
 - e) Is able and willing to make assigned presentations to various groups on the appropriate application of chest imaging studies.
 - f) Is able and willing to make presentations on both local/national level as assisted by staff.

- II. Medical Knowledge
 - a) Demonstrates knowledge of normal/abnormal anatomy as seen on Chest x-ray/chest CT.
 - b) Shows ability to recognize and describe common medical conditions as depicted on chest imaging studies.
 - c) Is familiar with both common and uncommon chest conditions and can formulate extensive differential diagnosis for findings on thoracic imaging studies.
 - d) Is able and willing to teach lower level residents
 - e) Can perform most interventional chest procedures with staff supervision.

- VI) III. Practice Based Learning and Improvement
 - a) Shows evidence of independent study using textbooks from suggested reading list.
 - b) Demonstrates appropriate follow up of interesting cases.
 - c) Prepares teaching file of interesting cases.
 - d) Is able and willing to make detailed presentations of thoracic imaging studies at both intra and interdepartmental conferences.
 - e) Upon request, participates in educational courses for clinicians, medical students, and fellow residents.

- VI) IV. Interpersonal Skills

Residents must demonstrate skills to:

 - a) Interact with x-ray technologists, medical students, fellow residents, and attending radiologists
 - b) Interact with clinicians when reviewing cases involving chest imaging studies.
 - c) Interact with patients/family when performing invasive procedures such as lung biopsy, thoracentesis.
 - d) Can participate in administrative and scholarly committees when asked.

- VI) V. Professionalism
 - a) Residents must demonstrate ability to interact with patient/patient's family/clinician when discussing significance of x-ray findings and their impact on patient care including what imaging studies may or may not be appropriate.
 - b) Can participate in activities relative to the role of chest imaging both to the medical community and the lay public.

- VI. Systems Based Practice
 - a) Shows ability to interact with clinicians regarding cost effective and streamlined patient evaluation for differing clinical entities.
 - b) Able and willing to participate in clinical conferences in which imaging studies used to guide patient care/evaluation.
 - c) Is able and willing to organize and present case conferences/didactic sessions as directed and supervised by radiology staff.

Goals and Objectives – Chest Radiology (Third and Fourth Year)

- VI) I. Patient Care

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

- a) Shows ability to interact with clinicians when reviewing chest imaging studies.
- b) Shows ability to recommend additional imaging studies as appropriate to better assess chest x-ray findings (e.g. CT/US/MRI)
- c) Shows ability to use PACS and hospital information systems
- d) Is able and willing to assist lower level residents
- e) Is able and willing to make assigned presentations to various groups on the appropriate application of chest imaging studies.
- f) Is able and willing to make presentations on both local/national level as assisted by staff.

II. Medical Knowledge

- a) Demonstrates knowledge of normal/abnormal anatomy as seen on Chest x-ray/chest CT
- b) Shows ability to recognize and describe common medical conditions as depicted on chest imaging studies.
- c) Is familiar with both common and uncommon chest conditions and can formulate extensive differential diagnosis for findings on thoracic imaging studies.
- d) Is able and willing to teach lower level residents.
- e) Can perform most interventional chest procedures with staff supervision.
- f) Can serve as an authoritative consultant to clinicians on the interpretation of and appropriate use of imaging studies.
- g) Can perform and teach interventional procedures under staff supervision.

VI) III. Practice Based Learning and Improvement

- a) Shows evidence of independent study using textbooks from suggested reading list.
- b) Demonstrates appropriate follow up of interesting cases.
- c) Prepares teaching file of interesting cases.
- d) Is able and willing to make detailed presentations of thoracic imaging studies at both intra and interdepartmental conferences.
- e) Upon request, participates in educational courses for clinicians, medical students, and fellow residents.
- f) Upon request, participates in educational activities at the local/national level.

VI) IV. Interpersonal Skills

Residents must demonstrate skills to:

- a) Interact with x-ray technologists, medical students, fellow residents, and attending radiologists.
- b) Interact with clinicians when reviewing cases involving chest imaging studies.
- c) Interact with patients/family when performing invasive procedures such as lung biopsy, thoracentesis.
- d) Can participate in administrative and scholarly committees when asked.
- e) Can serve as a liaison between our department with both other radiology departments and other specialty groups in our institution.

VI) V. Professionalism

- a) Residents must demonstrate ability to interact with patient/patient's family/clinician when discussing significance of x-ray findings and their impact on patient care including what imaging studies may or may not be

appropriate.

- b) Can participate in activities relative to the role of chest imaging both to the medical community and the general public.
- c) Is perceived as a role model for radiology from both within and outside the department.

VI. Systems Based Practice

- a) Shows ability to interact with clinicians regarding cost effective and streamlined patient evaluation for differing clinical entities.
- b) Able and willing to participate in clinical conferences in which imaging studies used to guide patient care/evaluation.
- c) Is able and willing to organize and present case conferences/didactic sessions as directed and supervised by radiology staff.
- d) Is able and willing to participate in activities at the local/national level under staff supervision.

Chest Evaluation

Interpretative Skills

- 1) Visual perception
- 2) Ability to formulate a differential diagnosis
- 3) Knows necessary anatomy
- 4) Performs competently all invasive procedures appropriate for level of training (manual skills)

Patient Care

- 5) Effectively interact with clinicians when reviewing chest imaging studies
- 6) Show ability to use PACS and other hospital information systems
- 7) Be able to assist and/or train other radiology residents and medical students
- 8) Be able and willing to make assigned presentations to various groups on the appropriate application of chest imaging studies

Knowledge

- 9) Know normal/abnormal anatomy as seen on chest imaging studies
- 10) Recognize and describe medical conditions as depicted on chest imaging studies
- 11) Perform interventional chest procedures appropriate to level of training
- 12) Serve as a consultant to clinicians on interpretation of and appropriate use of chest imaging studies

Practice-Based Learning and Improvement

- 13) Show evidence of independent study using assigned textbooks and journal articles

14) Prepare teaching files of interesting cases

15) Make detailed presentations of thoracic imaging studies at both intra and interdepartmental conferences

16) Participate in educational activities at local/national level

Interpersonal and Communication Skills

17) Effectively interact with x-ray technologists, medical students, fellow residents, and attending radiologists

18) Effectively interact with clinicians when reviewing cases involving chest imaging studies

19) Effectively interacts with patients/family when performing invasive procedures such as lung biopsy, thoracentesis

20) Participate in administrative and scholarly committees when asked

Professionalism

21) Shows ability to interact with patient/family/clinician when discussing significance of x-ray findings and their impact on patient care including what imaging studies may or may not be appropriate

22) Is perceived as a role model for radiology from both within and outside the department

Systems-Based Practice

23) Interact with clinicians regarding cost effective and streamlined patient evaluation for differing clinical entities

24) Be able and willing to organize and present case conferences/didactic sessions as directed and supervised by radiology staff

25) Be able and willing to participate in activities at the local/national level under staff supervision