The laboratory activities for the course will be conducted in Team Based Learning Format.
Required Reading Assignments are listed below. Note there will be a graded quiz [readiness assurance test] on the concepts covered in these readings!

**Cotran & Robbins Pathologic Basis of Disease**  
*9th ed*

*(available on library website as e-book)*

Chapter 15, section on tumors of the lung  
pp. 712-721

Chapter 7, section on Molecular basis of cancer (focus on RAS oncogene, EGFR and angiogenesis)  
pp. 280-306

**Objectives/Learning Outcomes:** After completing the reading assignments and in class exercise, students should be able to:

1. Discuss the epidemiology of lung cancer worldwide, and identify the risk factors associated with the various types.
2. Identify typical clinical presentations of lung cancer and select various diagnostic modalities, including imaging techniques.
3. Summarize the classification for malignant epithelial tumors of the lung. Explain why staging of lung cancers is important.
4. Identify characteristic morphological features (gross and microscopic) of malignant neoplasms of the lung (adenocarcinoma, squamous cell carcinoma, small cell carcinoma and carcinoid tumors). Discuss the therapeutic implications of the pathologic types.
5. Explain the concept of pre-neoplastic lesions and apply to squamous cell carcinoma and adenocarcinoma.
7. List at least one characteristic molecular genetic marker (feature) each for squamous cell, small cell, and adenocarcinoma of the lung.
8. Using an example, explain the rationale for using tumor molecular genetics to select appropriate targeted therapy.
9. Define paraneoplastic syndrome, and list common paraneoplastic syndromes associated with specific lung malignancies.