<table>
<tr><td>講義ユニット名
Title of Lecture</td><td colspan="2">Respiratory Systems</td><td>所属科目名
Title of Course</td><td>Clinical diagnosis and treatment I</td></tr>
<tr><td rowspan="2">講義ユニット責任者
Responsible Instructor</td><td>KOHNO NOBUOKI</td><td>所属
Affiliation</td><td colspan="2">Molecular and Internal Medicine (Internal Medicine II) (内線　Ext. Number 5195)</td></tr>
<tr><td></td><td>メール
E-mail</td><td colspan="2"></td></tr>
<tr><td rowspan="2">講義ユニットコーディネーター
Lecture Coordinator</td><td>NAKASHIMA TAKU</td><td>所属
Affiliation</td><td colspan="2">Molecular and Internal Medicine (Internal Medicine II) (内線　Ext. Number 5196)</td></tr>
<tr><td></td><td>メール
E-mail</td><td colspan="2"></td></tr>
<tr><td>授業方法
Lesson Style</td><td colspan="4">Lectures using Power Point slides.</td></tr>
<tr><td>概要
Overview</td><td colspan="4">If the lungs stop taking oxygen, we cannot survive anymore. Therefore, all efforts are focused on maintaining or resuming breathing and circulation during resuscitation. This unit will start with a review of respiratory anatomy and physiology. This unit will outline concepts, epidemiology, symptoms, tests, diagnosis, and treatment of almost all respiratory diseases. The subjects to be covered in this unit are very common, and therefore, important not only for respiratory experts but also for general physicians. You are expected to understand the diseases well enough to give a brief explanation on them to patients, rather than merely having the knowledge.</td></tr>
<tr><td>講義ユニットの到達目標
Academic Goals</td><td colspan="4">You are expected to explain:
-the structure of the airway, pulmonary lobes, segments, and the pulmonary hilum.
-the characteristics of the pulmonary circulation.
-the structures of the mediastinum and the pleural cavity.
-the structure of respiratory muscles and the mechanism of respiratory movement.
-lung volumes and the pressure-volume relationship (compliance) of the lung.
-the relationship between gas exchange and blood circulation in the alveoli.
-the effects of lung ventilation and perfusion (ventilation-perfusion ratio) on arterial blood gas.
-the mechanisms that control breathing via the respiratory center.
-the mechanisms of the transport of oxygen (O_2) and carbon dioxide (CO_2) by the blood.
-the defense mechanisms (immunological, non-immunological) and the metabolic functions of the airway.
-how to use a percutaneous oxygen saturation monitor.
-the objectives, indications and abnormal findings of arterial blood gas analysis.
-the objectives, indications and abnormal findings of respiratory function tests.</td></tr>
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	-the significance of imaging tests (radiography, CT, MRI, and nuclear medicine scanning) of the respiratory system. -the significance of bronchoscopy. -the significance of sputum examination. -the causes and pathology of cough and sputum. -important points for the diagnosis of patients with cough or sputum. -the causes of bloody sputum and hemoptysis. -important points for the diagnosis of patients with bloody sputum or hemoptysis. -the pathogenesis of wheezing and underlying diseases. -the definition, classification, pathophysiology, and major causes of respiratory failure. -the causes, classification, diagnosis, and treatment for hypoxemia (O_2) and hypercapnia (CO_2). -the causes, diagnosis, and treatment for acute upper respiratory tract infection (common cold). -major pathogens, symptoms, diagnosis, and treatment of bronchitis and pneumonia. -the symptoms, diagnosis, treatment, and procedures for reporting pulmonary tuberculosis. -an outline of nontuberculous mycobacterial infection. -the pathogenesis and prevention of aspiration pneumonia. -an outline of lung abscess and pyothorax. -the causes of chronic obstructive pulmonary diseases. -the definition, diagnosis, and treatment of chronic bronchitis. -the causes, diagnosis, and treatment of pulmonary emphysema. -the pathophysiology, diagnosis, and treatment of bronchial asthma. -the pathology, diagnosis, and treatment of interstitial pneumonia. -an outline of diffuse panbronchiolitis. -an outline of radiation pneumonitis. -an outline of pneumoconiosis and asbestosis. -the causes, symptoms, and treatment of acute respiratory distress syndrome (ARDS). -the causes, symptoms, and diagnosis of hypersensitivity pneumonitis. -the symptoms, diagnosis, and treatment of sarcoidosis. -an outline of eosinophilic pneumonia. -the classification, symptoms, diagnosis, and treatment of primary lung cancer. -the diagnosis and treatment of metastatic lung tumor. -an outline of hyperventilation syndrome. -an outline of sleep apnea syndrome. -the symptoms, diagnosis, and treatment of bronchiectasis. -the causes and diagnosis of atelectasis.

	-the causes, symptoms, diagnosis, and treatment of pleurisy. -the causes, symptoms, diagnosis, and treatment of pneumothorax -the types of mediastinal tumor and their diagnosis and treatment. -the causes, symptoms, and diagnosis of pneumomediastinum. -the indications of plural biopsy. -an outline of pleural mesothelioma.
講義日程 Class Schedule	See the attached schedule.
出席の取り扱い Class Attendance Policy	Attendance is taken every lecture using the Student Attendance Management System. Some instructors may give a small test during a class to additionally confirm students' attendance. A student whose attendance is less than two-thirds of all the classes is not eligible for taking the final examination.
評価項目 Evaluation Item	Achievement level of goals (basic understanding and application of knowledge)
評価法 Evaluation Method	Examination (in the form of a national examination)
履修上のアドバイス Advice for Taking the Lecture	
推奨参考書 Recommended Reference Books	