

Department of Respiratory Care

Course Specification of Respiratory Diseases I

Course No. (08 05 877)

2023

LII. Course Description:

This course provides a comprehensive overview of common respiratory diseases, focusing on their pathophysiology, clinical presentation, diagnosis, and management. Students will gain an in-depth understanding of respiratory failure, neuromuscular diseases, disorders of the chest wall and pleura, upper airway obstruction, asthma, COPD, bronchiolitis, bronchiectasis, bullous lung disease, cystic fibrosis, burn and inhalational injuries, lung carcinoma, pneumonia, pulmonary vascular diseases, and drowning injury. Through lectures, case studies, and practical exercises, students will develop the knowledge and skills necessary to assess, diagnose, and manage patients with these conditions.

IV Course Content:

A – Theoretical Aspect: (if any)

S	Units/ Topics List	No. of Weeks	Contact hours	CILOs
1	Respiratory Failure: ○ Types of respiratory failure (hypoxemic vs. hypercapnic) ○ Pathophysiology and clinical presentation ○ Management strategies (oxygen therapy, noninvasive ventilation, etc.)	1	2	
2	Neuromuscular Diseases: ○ Myasthenia gravis, Guillain-Barré syndrome, amyotrophic lateral sclerosis (ALS) ○ Impact on respiratory function ○ Ventilatory support and management	2	2	
3	Disorders of the Chest Wall and Pleura: ○ Kyphoscoliosis, flail chest, pleural effusions, pneumothorax ○ Diagnostic approaches and treatment options	3	2	
4	Upper Airway Obstruction Disorders: ○ Obstructive sleep apnea, laryngomalacia, foreign body aspiration ○ Airway assessment, management, and interventions	4	2	
5	Asthma: ○ Pathophysiology, triggers, and clinical manifestations ○ Pharmacological and non-pharmacological management ○ Acute exacerbations and emergency care	5	2	
6	Chronic Obstructive Pulmonary Disease (COPD): ○ Chronic bronchitis, emphysema ○ Risk factors, disease progression, and complications ○ Pharmacotherapy, oxygen therapy, pulmonary rehabilitation	6	2	

7	Bronchiolitis Bronchiectasis Bullous Lung Disease	- Pathophysiology, and clinical manifestations - Risk factors, disease progression, and complications - Pharmacological and non-pharmacological management oxygen therapy, pulmonary rehabilitation	7	2	
8	Mid-Term Exam		8	2	
9	Cystic Fibrosis and Bronchiectasis:	- Genetics, pathophysiology, and clinical features - Airway clearance techniques, infection control, and lung transplantation	9	2	
10	Burns and Inhalational Injuries:	- Types of burns, smoke inhalation, and toxic gas exposure - Airway management, ventilation, and respiratory care strategies	10	2	
11	Lung Carcinoma:	- Types of lung cancer, risk factors, and staging - Diagnostic procedures and treatment options - Palliative care considerations	11	2	

B - Practical Aspect: (if any)				
S	Tasks/ Experiments	Number of weeks	contact hours	CILOs
1	Not applicable	-	-	-
TOTAL		-	-	-
Number of Weeks /and Units Per Semester		-	-	-

VI. Teaching strategies of the course:

- 73.Lecture method
- 74.Brainstorming
- 75.Demonstration
- 76.Case study discussions

LIV. Schedule of Assessment Tasks for Students during the Semester Theoretical part

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Attendance and Activities	15 th week	5	5%	a, b
2	Student assignment	5 th and 12 th week	5	5%	b

3	Mid-term exam	7th or 8th week	20	20%	a, b
4	Final exam	16th-17th week	70	70 %	a, b, c, d
Total Theory Weight			100	100%	