Acute Respiratory Distress Syndrome (ARDS) Learning Objectives

ARDS Overview
- Recognize primary features of the 2012 Berlin definition of ARDS
- Categorize the severity of ARDS based on the ratio of PaO₂ to FiO₂
- Identify the pathologic stages of ARDS
- Understand consequences of ARDS, in terms of morbidity and mortality

ARDS Pathophysiology
- Understand the role of altered alveolar epithelial and capillary endothelial cell permeability
- Describe alterations in mechanical properties of the lung associated with ARDS
- Outline causes of abnormal oxygenation in ARDS
- Recognize underlying mechanisms potentially causing pulmonary hypertension

Causes of ARDS
- Define the routes of lung injury leading to ARDS
- List causes of lung injury via an aerogenous route
- List causes of lung injury via the pulmonary circulation
- Recognize clinical entities that can mimic ARDS

ARDS: Ventilatory Management
- Describe the effect of shunt on responsiveness to oxygen supplementation
- Identify potential beneficial effects of mechanical ventilation in ARDS
- Recognize potential complications of mechanical ventilation in ARDS
- Discuss ventilatory goals and strategy in managing ARDS
- Understand the concept and measurement of plateau pressure

ARDS: Non-Ventilatory Management
- Understand principles of fluid management in ARDS
- Recognize potential benefits and role of prone positioning
- Consider whether pharmacologic therapies are available for treating ARDS
- Identify preventive measures to reduce complications of management

Prognosis in ARDS
- Quantify the risk of mortality in ARDS
- Identify factors associated with survival or mortality
- Describe short- and long-term morbidity in survivors of ARDS