



Airway and Mechanical Ventilation Management Sample Course Agenda

Day 1	
7:00 am – 7:45 am	Breakfast
7:45 am – 8:00 am	Welcome and Overview
8:00 am – 8:15 am	Pretest Review
8:15 am – 8:35 am	<p>Overview of Airway Practice/Complications/Outcomes</p> <ul style="list-style-type: none"> • Understand various airway management options in the ICU • Identify challenges of airway management of critically ill patients • Determine difficult intubation factors
8:35 am – 8:55 am	<p>Intubation Medications</p> <ul style="list-style-type: none"> • Recognize the place in therapy for pharmacologic agents used during airway management • Understand the mechanism of action, pharmacokinetics, and dose of commonly used medications • Review safety concerns related to individual pharmacologic agents in critically ill patients
8:55 am – 9:15 am	<p>Laryngoscopy: Direct Laryngoscopy and Video Laryngoscopy</p> <ul style="list-style-type: none"> • Review DL technique and be able to determine Mac vs Miller • Review VL technique and know regular vs hyperangulated blades • Discuss selection of patient, environment, clinician • Understand the evidence associated with laryngoscopies
9:15 am – 9:30 am	Break
9:30 am – 12:00 pm	<p>Skill Stations: Airway Management</p> <ul style="list-style-type: none"> • Overview of Airway Practice • Intubation Medications • Laryngoscopy: Direct Laryngoscopy and Video Laryngoscopy
12:00 pm – 1:00 pm	Lunch
1:00 pm – 1:20 pm	<p>Surgical Airways</p> <ul style="list-style-type: none"> • Understand the different techniques for establishing emergency surgical airway access • Define methods for training and maintenance of skills • Understand the risk of subglottic stenosis and the rationale for early conversion of cricothyrotomy to tracheostomy
1:20 pm – 1:40 pm	<p>Team Approach to Airway Management</p> <ul style="list-style-type: none"> • Understand and discuss literature on emergency airway management with focus on challenges and its complications • Describe system-based elements of successful practice • Provide practical strategies for improving team performance and outcomes
1:40 pm – 2:00 pm	<p>Advanced Airway Techniques</p> <ul style="list-style-type: none"> • Review Awake fiberoptic bronchoscope intubation • Understand Supraglottic airway device exchange • Understand combined video laryngoscope and fiberoptic bronchoscope techniques

	<ul style="list-style-type: none"> • Review endotracheal intubation using an intubating laryngeal mask airway • Demonstrate laryngoscopy with a bougie • Understand retrograde endotracheal intubation
2:00 pm – 2:15 pm	Break
2:15 pm – 4:45 pm	Skill Stations: Airway Management <ul style="list-style-type: none"> • Surgical Airways • Team Approach to Airway Management • Advanced Airway Techniques
4:45 pm – 5:00 pm	Recap

Day 2	
7:30 am – 8:00 am	Breakfast
8:00 am – 8:15 am	Questions and Overview
8:15 am – 8:35 am	Safe Mechanical Ventilation <ul style="list-style-type: none"> Review current lung protective strategies and associated evidence Discuss modes of ventilation and basic settings to achieve safe ventilation Recognize potential complications of mechanical ventilation and how to mitigate them
8:35 am – 8:55 am	Patient Ventilator Dysynchrony <ul style="list-style-type: none"> Discuss interactions between patient and ventilator in synchronous and asynchronous breath delivery. Demonstrate a standardized method to interpret dyssynchrony through pressure and flow waveform analysis. Identify the clinical management and presence of different PVA types using a standardized method and published taxonomy.
8:55 am – 9:15 am	Refractory Hypoxemia: Now What? <ul style="list-style-type: none"> Define acute hypoxemic respiratory failure and refractory hypoxemia Describe the primary treatment options for refractory hypoxemia and risks associated with oxygen administration Explain the adjunct therapies available and evidence for the treatment of refractory hypoxemia Review alternative ventilator strategies for the treatment of refractory hypoxemia
9:15 am – 9:30 am	Break
9:30 am – 12:00 pm	Skill Stations: Mechanical Ventilation <ul style="list-style-type: none"> Safe Mechanical Ventilation Patient Ventilator Dysynchrony Refractory Hypoxemia: Now What?
12:00 pm – 1:00 pm	Lunch
1:00 pm – 1:20 pm	Noninvasive Ventilation/High-Flow Nasal Cannula <ul style="list-style-type: none"> Define the equipment, physiology and benefits of heated high-flow nasal cannula Apply the clinical application and understand the considerations for heated high-flow nasal cannula Determine the indications and contraindications of non-invasive positive pressure ventilation Perform clinical application and troubleshooting on non-invasive positive pressure ventilation
1:20 pm – 1:40 pm	Disease Specific Strategies <ul style="list-style-type: none"> Classify pulmonary pathophysiology into clinically useful categories. Summarize key points of pragmatic approaches to mechanical ventilation. Optimize gas exchange in the presence of acute and chronic pulmonary disease.
1:40 pm – 2:00 pm	Weaning the Difficult Patient <ul style="list-style-type: none"> Understand the importance of weaning patients Determine respiratory factors important to weaning patients Identify cardiac factors related to weaning patients Identify neuromuscular factors in weaning patients
2:00 pm – 2:15 pm	Break
2:15 pm – 4:45 pm	Skill Stations <ul style="list-style-type: none"> Noninvasive Ventilation/High-Flow Nasal Cannula

	<ul style="list-style-type: none">• Disease Specific Strategies• Weaning the Difficult Patient
4:45 pm – 5:00 pm	Recap – Moving Forward