



**Airway and Mechanical Ventilation Management
Agenda Option B**

DAY 1	
7:30 a.m. – 7:45 a.m.	Welcome and Announcements Airway and Mechanical Ventilation Management Overview
7:45 a.m. – 8:10 a.m.	Overview of Airway Practice, Complications, and Outcomes <ul style="list-style-type: none"> • Differentiate among airway management options in the ICU • Identify challenges of airway management in critically ill patients • Determine difficult intubation factors
8:10 a.m. – 8:35 a.m.	Intubation Medications <ul style="list-style-type: none"> • Recognize the place in therapy for pharmacologic agents used during airway management • Explain the mechanism of action, pharmacokinetics, and dosing of commonly used medications • Review safety concerns related to specific pharmacologic agents in critically ill patients
8:35 a.m. – 9:00 a.m.	Laryngoscopy: Direct Laryngoscopy and Videolaryngoscopy <ul style="list-style-type: none"> • Review direct laryngoscopy technique and compare Mac versus Miller blades • Review videolaryngoscopy technique and compare regular versus hyperangulated blades • Discuss selection of patient, environment, and clinician • Analyze the evidence surrounding laryngoscopy
9:00 a.m. – 9:15 a.m.	BREAK
9:15 a.m. – 11:45 a.m.	SKILL STATIONS: Airway Management Rotation 1 A. Overview of Airway Practice <ul style="list-style-type: none"> • Review airway management options • Determine factors that make intubation difficult B. Intubation Medications <ul style="list-style-type: none"> • Discuss case studies using pharmacologic agents • Review effectiveness of pharmacologic agents C. Laryngoscopy: Direct Laryngoscopy and Videolaryngoscopy <ul style="list-style-type: none"> • Review laryngoscopy techniques • Practice direct and videolaryngoscopy techniques • Examine effectiveness of regular versus hyperangulated blades
11:45 a.m. – 12:45 p.m.	LUNCH
12:45 p.m. – 1:05 p.m.	Surgical Airways <ul style="list-style-type: none"> • Practice techniques for establishing emergency surgical airway access • Define methods for training and maintenance of skills • Explain the risk of subglottic stenosis and the rationale for early conversion of cricothyrotomy to tracheostomy
1:05 p.m.– 1:25 p.m.	Team Approach to Airway Management <ul style="list-style-type: none"> • Discuss literature on emergency airway management with a focus on challenges and complications • Describe system-based elements of successful practice • Evaluate practical strategies for improving team performance and outcomes

1:25 p.m.– 1:45 p.m.	Advanced Airway Techniques <ul style="list-style-type: none"> • Review awake fiberoptic bronchoscope intubation • Discuss supraglottic airway device exchange • Evaluate combined videolaryngoscope and fiberoptic bronchoscope techniques • Review endotracheal intubation using an intubating laryngeal mask airway • Demonstrate laryngoscopy with a bougie • Explore retrograde endotracheal intubation
1:45 p.m. – 2:00 p.m.	BREAK
2:00 p.m. – 4:30 p.m.	<p style="text-align: center;">SKILL STATIONS: Airway Management Rotation 2</p> D. Surgical Airways <ul style="list-style-type: none"> • Practice emergency surgical airway access • Review conversion of cricothyrotomy to tracheostomy E. Team Approach to Airway Management <ul style="list-style-type: none"> • Examine how intubation can lead to cardiac arrest • Practice and review team process strategies • Determine challenges and complications of airway management F. Advanced Airway Techniques <ul style="list-style-type: none"> • Demonstrate advanced airway intubation options • Practice advanced intubation techniques
4:30 p.m. – 4:45 p.m.	WRAP-UP DAY 1

DAY 2	
7:30 a.m. – 7:45 a.m.	Welcome and Announcements
7:45 a.m. – 8:10 a.m.	Safe Mechanical Ventilation <ul style="list-style-type: none"> • Review current lung-protective strategies and associated evidence • Discuss ventilation modes and basic settings to achieve safe ventilation • Recognize potential complications of mechanical ventilation and how to mitigate them
8:10 a.m. – 8:35 a.m.	Patient-Ventilator Dyssynchrony <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 of different patient-ventilator asynchrony types using a standardized method and published taxonomy
8:35 a.m. – 9:00 a.m.	Refractory Hypoxemia: What Next? <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
9:00 a.m. – 9:15 a.m.	BREAK

9:15 a.m. – 11:45 a.m.	<p style="text-align: center;">SKILL STATIONS: Mechanical Ventilation Rotation 1</p> <p>A. Safe Mechanical Ventilation</p> <ul style="list-style-type: none"> • Explain key principles and mechanics of mechanical ventilation • Apply types and modes of mechanical ventilation based on case study clinical context • Articulate acute complications of mechanical ventilation and strategies to prevent and/or treat them <p>B. Patient-Ventilator Asynchrony</p> <ul style="list-style-type: none"> • Demonstrate and interpret dyssynchrony through pressure and waveform analysis • Differentiate between patient interactions and ventilators <p>C. Refractory Hypoxemia: Now What?</p> <ul style="list-style-type: none"> • Discuss treatment options for refractory hypoxemia • Determine alternative ventilator strategies for hypoxemia
11:45 a.m. – 12:45 p.m.	LUNCH
12:45 p.m. – 1:10 p.m.	<p>Noninvasive Ventilation/High-Flow Nasal Cannula</p> <ul style="list-style-type: none"> • Define the equipment, physiology, and benefits of heated high-flow nasal cannula • Apply heated high-flow nasal cannula appropriately • Compare indications and contraindications for noninvasive positive pressure ventilation • Apply and troubleshoot noninvasive positive pressure ventilation
1:10 p.m. – 1:35 p.m.	<p>Disease-Specific Strategies</p> <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
1:35 p.m. – 2:00 p.m.	<p>Weaning the Difficult Patient</p> <ul style="list-style-type: none"> • Discuss the importance of weaning patients • Determine respiratory factors important to weaning patients • Identify cardiac factors in weaning patients • Identify neuromuscular factors in weaning patients
2:00 p.m. – 2:15 p.m.	BREAK
2:15 p.m.– 4:30 p.m.	<p style="text-align: center;">SKILL STATIONS: Mechanical Ventilation Rotation 2</p> <p>D. Noninvasive Ventilation/High-Flow Nasal Cannula</p> <ul style="list-style-type: none"> • Define the physiology and benefits of heated high-flow cannula • Apply noninvasive positive pressure ventilation • Compare indications and contraindications of noninvasive positive pressure ventilation <p>E. Disease-Specific Strategies</p> <ul style="list-style-type: none"> • Evaluate pragmatic approaches to mechanical ventilation • Determine optimal gas exchange in acute and chronic pulmonary disease • Demonstrate approaches to mechanical ventilation <p>F. Weaning the Difficult Patient</p> <ul style="list-style-type: none"> • Identify indicators of readiness to wean from select case studies • Apply ventilator modes for difficult patients
4:30 p.m. – 4:45 p.m.	WRAP-UP DAY 2