

Lectures repeated in first six weeks of each year not including Year-Directed Conferences (YDCs)

Week	Title for R1s	Topics	Title for R2s & R3s
001	Orientation to Orientation		
049	Overview of the Three-Year Curriculum	Lecture groupings	
097		First six weeks of every year	
		Model of clinical practice of EM	
		Concentrated topics in EM	
		Series on interests in EM	
		Case presentations	
		Morbidity & mortality conference	
		Faculty learning cases	
		Resident interesting cases	
		R3 toxicology cases	
		Other educational experiences	
	Bedside Ultrasonography [part 1] – Introduction and IV Access	Curriculum introduction R1 orientation R2 rotation Equipment Physics Planes Modes Artifacts Basic control panel Basic features Advanced features Transducers Soft-tissue applications Abscess detection/drainage Foreign-body localization/removal Vascular-access applications Central Peripheral	
	Bedside Ultrasonography [part 2] – Focused Assessment for Trauma	Decision-making Hemodynamic compromise Hemodynamic stability Applications Hemorrhage Free intracavitary fluid Pneumothorax Trauma in pregnancy Estimated gestational age Fetal cardiac activity/rate Placental abruption Uterine rupture	
	Bedside Ultrasonography [part 3] – Hepatobiliary and Renal	Decision-making Abdominal, flank, and back pain Ascites Jaundice Applications Peritoneum Kidney Gallbladder Liver	
	Bedside Ultrasonography [part 4] – Aorta and Surgical Abdomen	Decision-making Hemodynamic compromise Abdominal, flank, and back pain Fever Vomiting, and diarrhea Applications Abdominal aortic aneurysm	

		Intraperitoneal hemorrhage Gastrointestinal Inflammation Appendicitis Diverticulitis Obstruction Perforation	
	Rules of the Road	Welcome back Introductions Reorientation Administrative procedures	Rules of the Road
	How to Teach	Didactic Clinical Small-group discussions Manual skills	How to Teach
	Approach to the Undifferentiated Complaint	Initial approach and stabilization Clinical assessment Clinical reasoning Diagnostic adjuncts Expanded differential diagnoses Principles of management	Approach to the Undifferentiated Complaint
	ED Triage	Purpose of triage Daily <i>versus</i> exceptional settings Gestalt <i>versus</i> formal process Five-level triage system Derivation Validation Application to unique populations	ED Triage
002 050 098	Bedside Ultrasonography [part 5] – Urogenital	Decision-making Vaginal bleeding Pelvic pain or mass Testicular pain Applications First-trimester pregnancy Intrauterine pregnancy Ectopic pregnancy Pregnancy loss Second/third-trimester pregnancy Fetal cardiac activity/rate Placental attachment/position Premature labor Fetal position Ovarian cysts Torsion Adnexal Testicular Tubo-ovarian abscess Urinary retention	
	Bedside Ultrasonography [part 6] – Newer Applications	Cardiac applications Cardiac activity Aortic dissection Pericardial effusion Myocardial ischemia Pulmonary embolism Vascular applications Arterial occlusion Deep venous thrombosis Other	
	Risk Management		
	Patient Satisfaction		
	Approach to Shock	General considerations Common pathophysiology	
			Approach to Shock

		Stress response Compensatory mechanisms Irreversibility Unique considerations Hypovolemic shock Cardiogenic shock Septic shock Obstructive shock	
	Interface with EMS Personnel		
	Introduction to Laboratory Use	Patient evaluation Ruling out <i>versus</i> ruling in Impact of diagnostic testing Patient/consultant expectations ED efficiency/throughput False results Cost Common laboratory tests Complete blood count Basic metabolic profile Arterial blood gas analysis Organ-function testing Organ-injury testing Coagulation studies Urinalysis Fluid cultures	
		Protocol review General Specialty referral centers Examination	EMS Protocol Review
		Difficult ECGs (even years) Difficult x-rays (odd years)	ECG or Radiology Cases (alternating years)
003	Overview of Evidence-Based Medicine	Principles of EBM Clinical decision-making Hierarchy of evidence EBM approach Using the medical literature Framing a question Searching for an answer Sources of evidence Clinical application	
051			
099	Multiculturalism and Care Delivery	Disparities Access Outcomes Cultural competence Definition Perceptions Evolution of expectations Beliefs, values, and experiences Improvement Individual Institutional Resources Facility Community	
	Managing Personal & Professional Stress	Major stressors in EM Consequences Burn-out Impairment Coping techniques Physical fitness Social relationships Relaxation and renewal	

		<ul style="list-style-type: none"> Sleep hygiene Resources Residency Community 	
	Approach to Life-Threatening Abdominal Emergencies	<ul style="list-style-type: none"> General considerations Abdominal & GI disorders Extraabdominal disorders ED presentations <ul style="list-style-type: none"> Ruptured ectopic pregnancy Ruptured/leaking AAA Intestinal obstruction Perforated viscous Mesenteric ischemia Ascending cholangitis Hemorrhagic pancreatitis Diarrhea Diagnostic adjuncts <ul style="list-style-type: none"> Bedside testing Laboratory testing Imaging ED interventions Continued ED care 	Approach to Life-Threatening Abdominal Emergencies
	Introduction to Disaster Medicine	<ul style="list-style-type: none"> Definitions of the term "disaster" Disaster management Emergency medicine interfaces Disaster medicine <ul style="list-style-type: none"> Evolution from military medicine Unique body of knowledge The "Disaster Cycle" <ul style="list-style-type: none"> Preparedness Warning Event Response Recovery Systems-oriented approach <ul style="list-style-type: none"> Components Perspectives Overview of mitigation strategies 	
	Introduction to Mass-Gathering Medicine	<ul style="list-style-type: none"> Characteristics of mass gatherings <ul style="list-style-type: none"> General Medical Planning & operational issues <ul style="list-style-type: none"> On-scene care Evacuation Security Support of Dayton's US Air & Trade Show 	
		<ul style="list-style-type: none"> Initial approach <ul style="list-style-type: none"> Assessment Indications for interventions Techniques <ul style="list-style-type: none"> Basic Advanced Pharmacological adjuncts Confirmation of patency Ventilation <ul style="list-style-type: none"> Manual Mechanical 	Airway Interventions Review
004 052	Critically appraised topic (CAT) writing and presenting	<ul style="list-style-type: none"> CAT <ul style="list-style-type: none"> Purpose Format Presentations 	

100		Verbal Written	
	Approach to Life-Threatening Thoracic Emergencies	General considerations Thoracic disorders Extra-thoracic disorders ED presentations Acute coronary syndromes Aortic dissection Pulmonary embolism Pneumonia Pneumothorax Nontraumatic cardiac tamponade Esophageal rupture Diaphragmatic hernia Diagnostic adjuncts Bedside testing Laboratory testing Imaging ED interventions Continued ED care	Approach to Life-Threatening Thoracic Emergencies
	Approach to Life-Threatening Hypertensive Emergencies	General considerations ED presentations Hypertensive encephalopathy Stroke syndromes Subarachnoid hemorrhage Pulmonary edema Myocardial ischemia/injury Aortic dissection Renal insufficiency Empirical management Emergencies Urgencies Neither	Approach to Life-Threatening Hypertensive Emergencies
005 053 101	Approach to Life-Threatening Obstetrical Emergencies	General considerations Diagnosis of pregnancy Two patients Diagnosis and management Appendicitis Pyelonephritis Venous thromboembolism Preeclampsia and eclampsia Ectopic pregnancy Placenta previa Abruptio placenta Abdominopelvic trauma Perimortem cesarean section	Approach to Life-Threatening Obstetrical Emergencies
	Approach to Life-Threatening Neurological Emergencies	General considerations ED presentations Diagnostic adjuncts Bedside testing Laboratory testing Imaging ED interventions Continued ED care	Approach to Life-Threatening Neurological Emergencies
	Approach to Non-Bronchospastic Respiratory Failure	General considerations Respiratory disorders Nonrespiratory disorders ED presentations Mechanical respiratory failure Metabolic respiratory failure Diagnostic adjuncts Bedside testing	Approach to Non-Bronchospastic Respiratory Failure

006 054 102		Laboratory testing Imaging ED interventions Prevention of intubation Endotracheal intubation Post-intubation ventilation Continued ED care	
	Approach to Bronchospastic Respiratory Failure	General considerations Asthma COPD ED presentations Bronchospasm Bronchospastic respiratory failure Diagnostic adjuncts Bedside testing Laboratory testing Imaging ED interventions Prevention of intubation Endotracheal intubation Post-intubation ventilation Continued ED care	Approach to Bronchospastic Respiratory Failure
	Introduction to Pediatric Emergency Medicine	ED use and outcomes Community hospitals Children's hospitals Triage considerations Unique body of knowledge Social issues Consent Advocacy Range of size Patient considerations Management considerations Evolving physiology Mental Physical Pediatric specific problems EMS considerations Short courses APLS PALS Specialty Fellowships Board certification	Introduction to Pediatric Emergency Medicine
	Approach to the Febrile Child	General considerations Approach by age group Neonatal period < 2 months of age 2–3 months of age 3–6 months of age 6–36 months of age Impact of vaccination programs	Approach to the Febrile Child
	Approach to Sight-Threatening Emergencies	General considerations ED triage Key questions Levels and interventions History Physical examination Diagnostic adjuncts Bedside testing Laboratory testing Imaging	Approach to Sight-Threatening Emergencies

		Diagnoses by categories Critical Emergent Urgent Algorithmic approach Empirical management Nontraumatic Traumatic Dispositions	
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