

**ADVANCED EMERGENCY MEDICAL TECHNICIAN
COURSE SCHEDULE and CURRICULUM**

Lesson	Section 1	Welcome
1		MATC/EMS Orientation & Policies
		Syllabus Review
Instructors Needed 2	4 Hours	Course Paperwork
		Hospital required course
		Training permits
2	Section 1	Preparatory
	4 Hours	Complete Course Paperwork
Instructors Needed 2		Human Anatomy
		Infectious Diseases, Blood Bourne Pathogens
		Patient Assessment
		NEW: Public Health: QA, interfaces with EMS, Public Health
READ: AAOS: Ch 2: 24-59; Ch 5: 118-178; Ch 36: 1252-1288		
3	Section 1	Preparatory
ONLINE	4 hours	EMS Systems, Medical Legal and Ethical & EMS Systems Communications
Instructors Needed 1		NEW: Ethical principles & moral obligations, Team communication and dynamics & Therapeutic communication
		Documentation & Report Writing
READ: AAOS: Ch 3: 64-81; Ch 4: 84-114		
ASSIGNMENT:		
Online Navigate Ch. 1: EMS Systems-- Workforce Safety and Wellness: Pretest, Interactive Lecture		
Online Navigate Ch. 3: Medical, Legal, and Ethical Issues: Pretest, Interactive Lecture		
Online Navigate Ch. 4: Communications and Documentation: Pretest & Interactive Lecture		
QUIZ Online Navigate: Medical, Legal, Ethical and EMS Systems Communications Quiz		
Due by Lesson #4		
4	Section 1	Preparatory
	4 hours	Medical Terminology
Instructors Needed 2		Review MATC Field Run Report
		Patient Assessment Lab & Monitoring Devices. NEW: ETCO2, 12 Lead EKG,
		Patient Assessment Practical Exam
		Handouts: Common Prefixes/Suffixes, Narrative Questions & Template
READ: AAOS Ch. 9: 306-366		

**ADVANCED EMERGENCY MEDICAL TECHNICIAN
COURSE SCHEDULE and CURRICULUM**

5	Section 1	Pharmacology
Instructors Needed 1		Shock & Resuscitation
		NEW: Basic Cell Physiology Fluids & Electrolytes, Acid Base Balance
READ: AAOS Ch. 1: 163-165; Ch. 3: 349-350; Ch. 8: 255-261; Ch 6: 198-206;		
6	Section 1	Pharmacology
ONLINE		Principles of Pharmacology NEW: Legislation, chemical, generic, official, trade names, authoritative sources, classifications, storage/security, utilization terms, pharmacokinetics & pharmacodynamics
Instructors Needed 1		Medication Administration
READ: AAOS Ch. 7: 218-303 Ch. 8: 252-302		
ASSIGNMENT: Online Navigate Principles of Pharmacology: Pretest,, Interactive Lecture Online Navigate Vascular Access and Medication Administration Pretest, Interactive Lecture QUIZ Online Navigate: Medication Administration & Pharmacology Quiz Due by Lesson #7		
7	Section 1	Pharmacology
Instructors Needed 3	4 Hours	Medication Administration NEW: IO, IV & IN
		Demonstrations & Practice
8	Section 1	Pharmacology
Instructors Needed 3	4 Hours	Practical LAB: Medication Administration, IO, IV, SubQ, IM, Bolus
9	Section 1	Pharmacology
Instructors Needed 3	4 Hours	LAB: Medication Administration, IO, IV, SubQ, IM, Bolus

**ADVANCED EMERGENCY MEDICAL TECHNICIAN
COURSE SCHEDULE and CURRICULUM**

10	Section 2	Airway
	1.5 Hours	SECTION 1 & 2 EXAM: Preparatory & Pharmacology
Instructors Needed 1		Respiratory System; A&P and Pathophysiology of Respiration and Assessment NEW ANATOMY: Hypopharnx, Arytenoid cartilage, Jugular notch, cilia, phrenic nerve, laryngeal edema and spasm. NEW PHYSIOLOGY OF RESPIRATION: Pulmonary ventilation, interruption of pulmonary ventilations--O2 transport, circulation & cellular, ECO2
	15 Min	Exam Review
READ: AAOS Ch. 5: 137-160; Ch. 10: 374-395		
11	Section 2	Airway
Instructors Needed 2	4 Hours	Respiratory Emergencies
		Lab: Techniques of Airway Management: Adjuncts, CPAP, BiPap, Positive Pressure Ventilation, King, Combitube, ETCO2
READ: Ch. 10: 395-446; Ch. 14: 532-571		
12	Section 2	Airway
Instructors Needed 2	4 Hours	Lab: Techniques of Airway Management: Adjuncts, CPAP, BiPap, Positive Pressure Ventilation, King, Combitube, ETCO2
		Airway Practical Evaluation
ASSIGNMENT: Due by lesson #13 Online Navigate Cardiovascular Emergencies Interactive Lecture		

13	Section 3	Medical Emergencies: Cardiac
Instructors Needed 1		Cardiovascular Anatomy NEW ANATOMY: Hepatic portal, Aortic branches, Major Veins & Arteries, Chordae Tendineae, Papillary muscles, major arteries, veins, electrical system
		Cardiovascular Pathophysiology & Assessment NEW: Hemodynamics, Hydrostatic & Oncotic pressure, Regulation of heart function (Chronotropic, Dromotropic, Inotropic), Baroreceptors, Chemoreceters, Alpha/Beta effects, Starlings Law, Conduction system, Rhythm ID, EKG, 12L
READ: AAOS Ch. 5: 136-161; Ch. 15: 572-579		
14	Section 3	Medical Emergencies
Instructors Needed 2		Cardiovascular Emergencies
		Cardiovascular Lab: Assessment, 12L, Rhythms
READ: AAOS Ch. 15: 579-611		
15	Section 3	Medical Emergencies
Instructors Needed 3	4 Hours	Cardiovascular Practical Evaluation

**ADVANCED EMERGENCY MEDICAL TECHNICIAN
COURSE SCHEDULE and CURRICULUM**

16	Section 4	Medical Emergencies
Instructors Needed 1	1.5 hours	SECTION 2 & 3 EXAM: AIRWAY & CARDIOVASCULAR
		Neurological A&P, Disorders, Assessment and Age Related Variations
		A&P, Non-Traumatic Musculoskeletal Disorders
		Diseases of Eyes, Ears, Nose & Throat
		A&P, Endocrine Disorders and Hematologic Emergencies, Assessment and Age Related Variations NEW: Hematology--Blood cells and functions, Assessment, Sickle Cell, Pediatric & Geriatric Conditions & Emergencies
	15 min	Review
READ: AAOS Ch. 16: 612-637; Ch. 18: 662-691		
17	Section 4	Medical Emergencies
ONLINE		A&P, Assessment, Gastrointestinal and Urologic Emergencies NEW: Calculi, Renal Failure, Dialysis, Hemorrhages, Peritonitis, Peds.
Instructors Needed 1		Immunology A&P, Disorders, Assessment NEW: Mast cells, histamine, leukotrienes and other mediators
		Psychological Emergencies NEW: Agitated Delirium
READ AAOS Ch. 17: 638-661; Ch. 19: 692-713; Ch. 21: 742-761		
ASSIGNMENT		
Online Navigate Gastrointestinal and Urologic Emergencies Interactive Lecture		
Online Navigate Immunologic Emergencies Interactive Lecture		
QUIZ Gastrointestinal, Urologic and Immunologic Emergencies		
Due by Lesson #18		
18	Section 4	Medical Emergencies
Instructors Needed 2	4 Hours	LAB: Endocrine, Neurological, Gastrointestinal and Urologic Disorders
		Endocrine, Neurological, Gastrointestinal & Urologic Evaluation Practical

**ADVANCED EMERGENCY MEDICAL TECHNICIAN
COURSE SCHEDULE and CURRICULUM**

19	Section 5	Trauma
	1.5 Hours	SECTION 4 EXAM Medical Emergencies
		Trauma Overview: Field Triage Protocols, Types of Injuries, MOI
Instructors Needed 2		Special considerations
		Trauma Patient Assessment and Practical Lab
	30 Min	Exam Review
READ AAOS Ch. 23 780-807		
20	Section 5	Trauma
	4 Hours	Bleeding & Shock NEW: Shock: cellular level, Fick principle, Aerobic metabolism/glycolysis, Anaerobic metabolism, Peds and Adults, Fluid resuscitation special considerations,
Instructors Needed 2		Chest Injuries, Assessment, Management NEW: Commotio Cordis
		Trauma Lab
READ AAOS Ch. 11: 450-477; Ch. 24 808-833; Ch. 29 974-997		
21	Section 5	Trauma
Instructors Needed 2		Environmental
		Abdominal and Genitourinary Injuries, Assessment & Management
		Tissue Injuries and Management
		Ortho NEW: Compartment Syndrome, Rhabdomyolysis
		Trauma Lab
READ: AAOS Ch. 25: 834-869; Ch. 28: 946-973;		
22	Section 5	Trauma
Instructors Needed 2	4 hours	Head, neck spine
		Trauma Lab
READ: AAOS Ch. 31: 1054-1091		
23	Section 5	Trauma
Instructors Needed 2	4 Hours	Trauma LAB: Chest, Abdominal, Ortho, Head, Neck, Spine and Soft Tissue Injuries
		Evaluations Lab

**ADVANCED EMERGENCY MEDICAL TECHNICIAN
COURSE SCHEDULE and CURRICULUM**

24	Section 5	Special Populations
Instructors Needed 1	1.5 Hours	SECTION 5 EXAM Trauma
		OB & Gynecologic Emergencies
		Neonate Assessment and Resuscitation
		NEW: Life Span Development
	15 Min	Exam Review
READ: AAOS Ch. 32: 1092-1133; Ch. 22: 762-779		
25	Section 5	Special Populations
Instructors Needed 1	4 Hours	Pediatrics
		Geriatrics
		Patient's with Special Challenges
READ: AAOS Ch. 33: 1134-1193, Ch. 34 1194-1231; Ch. 35 1232-1249		
ASSIGNMENT		
Online Navigate: Pediatric Emergencies Interactive Lecture		
Online Navigate: Geriatric Emergencies Interactive Lecture		
Online Quiz: Pediatric and Geriatric Emergencies Quiz		
Due by Lesson #26		
26	Section 5	Special Populations
Instructors Needed 2	4 Hours	Special Populations Evaluations Lab
27	Section 5	EMS Operations
Instructors Needed 2	4 Hours	Ambulance operations
		Air-Medical
		Extrication
		MCI-NIMS Online 100 and 700 Certificate Due
		Practical skills lab
READ: AAOS Ch. 37: 1294-1323; Ch. 38: 1324-1341		
28	Section 5	SECTION 6 EXAM: Special Populations
Instructors Needed 3	4 Hours	NREMT LAB PRACTICE
		Exam Review
29	4 Hours	FINAL EXAM
Instructors Needed 3		NREMT LAB PRACTICE
		No Review on Final Exam
30	4 Hours	FINAL PRACTICAL
Instructors Needed 5		Patient Assessment, ventilation management, peds respiratory compromise, IO, IV, medication push, trauma assessment and cardiac arrest.