

2014 Gathering of Eagles



Indoctrinating the Docs: Medical Student EMT Program

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Historical Perspective

Expansion Medical Schools

- **2009 - 2013**
 - **15 new medical schools established**
1800 students / year
 - **Total: 141**
 - Matriculants: 19,517 (46% female)**
 - Graduates: 17,341**

Historical Perspective

Expansion Medical Schools

Arizona

University of Arizona College of Medicine-Phoenix

California

University of California-Riverside College of Medicine

Connecticut

Frank H. Netter, MD School of Medicine at Quinnipiac

Florida

University of Central Florida College of Medicine

Charles E. Schmidt College of Medicine at Florida Atlantic University

Florida International University Herbert Wertheim College of Medicine

Historical Perspective

Expansion Medical Schools

Michigan

Central Michigan University College of Medicine

Western Michigan University School of Medicine

Oakland University William Beaumont School of Medicine

New Jersey

Cooper Medical School at Rowan University

New York

Hofstra North Shore-LIJ School of Medicine

Pennsylvania

The Commonwealth Medical College

Historical Perspective

Expansion Medical Schools

South Carolina

University of South Carolina School of Medicine Greenville

Texas

Texas Tech University Health Sciences Center Paul L. Foster School of Medicine

Virginia

Virginia Tech Carilion School of Medicine

USC School of Medicine Greenville



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Clinical Courses

Clinical Diagnosis and Reasoning

Performing history and physical exams

Laboratory testing

Radiological imaging

Medical procedures

Integration of cases into core competencies:

Medical Knowledge

Patient care

Communication

Professionalism

Systems based practice

Practice based learning

USC School of Medicine Greenville

Clinical Courses

Medicine and Society

Ethics

Culture and Diversity

Professionalism

Communication

Interprofessional Health

Biostatistics and evidence based medicine

Research

Emergency Medical Technician training

Medical Student EMT Program

EMT Program Requirements

Full 200+ hour EMT program completion

Certification - SC EMT (NREMT)

Maintenance of certification

One 12-hour shift / month

Patient write-up / semester



Medical Student EMT Program

EMT course

<u>Totals</u>	<u>2012 (Charter)</u>
Weeks	6
Hours	218
On-Line	13
Patient encounters	5
Examinations	9
Integration	None

Medical Student EMT Program

EMT course

<u>Totals</u>	<u>2012 (Charter)</u>	<u>2013</u>
Weeks	6	14
Hours	218	250
On-Line	13	13
Patient encounters	5	10
Examinations	9	6
Integration	None	Anatomy

WEEK 5	8/26	8/27	8/28	8/29	8/30
TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:00	EMT: Fundamentals of Trauma	Bleeding & Shock	ANAT: 0700-0900 Introduction to Radiology	EMT: Cardiovascular Emergencies	EMT LAB: Basic Life Support Course
9:00			ANAT: Thoracic Wall & Breast		
10:00	ANAT: Back & Spine	EMT: Injuries to the Head & Spinal	EMT: Pharmacology & Medications	ANAT: Mediastinum, Heart, & Lung	
11:00	ANAT: Spinal Cord & Nervous System				
12:00	LUNCH	LUNCH	LUNCH	LUNCH	
1:00	ANAT LAB: Back Muscles & Laminectomy	EMT LAB: Spinal Immobilization	EMT: Respiratory Emergencies	ANAT LAB: Thoracic wall, Heart Great Vessels	EMT LAB: Basic Life Support Course
2:00					
3:00		EMT LAB: Trauma Patient Assessment			
4:00					

WEEK 7	9/9	9/10	9/11	9/12	9/13
TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:00	CDR	EMT: Acute Abdominal Emergencies	ANAT: 0700-0800 Abd I	ANAT: 0700-0800 Abd II	Written Exam 3
9:00			CDR	ANAT: Urinary System, Posterior Abdominal Wall	
10:00	ANAT: Anterior Abdominal Wall, Stomach, Liver, Gall Bladder, Spleen	EMT: Injuries to the Abdomen	EMT: Immunology and Infectious Disease		Practical Exam 3
11:00					
12:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
1:00	ANAT LAB: Mesenteries, Celiac, Stomach, Liver, Bile Duct, Portal System	EMT LAB: Medical Patient Assessment	ANAT LAB: Superior & Inferior Mesenteric Arteries Pancreas, Intestines		
2:00					
3:00		EMT LAB: Trauma Patient Assessment			
4:00					

EMT Functional Exercise

Capstone

4 groups (13 students / group)

4 hours (2 scenarios / 2 hours)

EMT Functional Exercise

Capstone

4 groups (13 students / group)
4 hours (2 scenarios / 2 hours)

Motor vehicle crash



EMT Functional Exercise

Capstone

4 groups (13 students / group)
4 hours (2 scenarios / 2 hours)

Motor vehicle crash



Active shooter MCI



EMT Functional Exercise



EMT Functional Exercise



EMT Functional Exercise



EMT Functional Exercise



EMT Functional Exercise



EMT Functional Exercise



EMT Functional Exercise



EMT Functional Exercise



EMT Functional Exercise



Results

NREMT Practical Exam Results

<u>Description</u>	<u>2012</u>	<u>2013</u>
Students	51	53
Pass (1 st attempt)	20 (39%)	17 (32%)
Pass (2 nd attempt)	22 (43%)	32 (60%)
Pass (3 rd attempt)	3 (6%)	2 (4%)
	45 (88%)	51 (96%)
Pass (4 th attempt)	4 (8%)	2 (4%)
Pass (5 th attempt)	2 (4%)	

Results

NREMT Written Exam Results

<u>Description</u>	<u>2012</u>	<u>2013</u>
Students	51	53
Pass (1 st attempt)	50 (98%)	51 (96%)
Pass (2 nd attempt)	1 (2%)	2 (4%)

Results

NREMT Repeat Practical Exam Results

32 weeks post course

Cardiac Arrest Management / AED:

Patient Assessment / Management - Medical:

Results

NREMT Repeat Practical Exam Results

32 weeks post course

Cardiac Arrest Management / AED:

Pass 25 (48%)

Fail 27 (52%)

Patient Assessment / Management - Medical:

Pass 8 (15%)

Fail 44 (85%)

Costs

Program Costs

Greenville Technical College
Fingerprinting and background check
Books

<u>Class</u>	<u>Cost / Student</u>	<u>Other</u>	<u>Exercise</u>	<u>Total</u>
2012	\$1362	\$120	\$2040	\$80,480
2013	\$1438	\$120	\$4310	\$88,334

Medical Student EMT Program

Future Challenges

Expanded class size

2014: 75 (82)

2015: 100 (110)

Ambulance ride time

Additional adjunct faculty

Equipment

Functional Exercise

Medical Student EMT Program

Future Challenges

<u>Totals</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Weeks	6	14	13
Hours			
Lecture / Lab	218	250	181
On-Line	13	13	33
Examinations	9	6	4
Integration	None	Anatomy	Anatomy Embryology Clinical Med

Medical Student EMT Program

Program Benefits

Early clinical experience

First introduction to interprofessional health

Scholarly activity

Medical Student EMT Program

Program Benefits

Early clinical experience

First introduction to interprofessional health

Scholarly activity

* **Appreciation of societal realities**



Medical Student EMT Program

Clinical Reflections

Required twice / semester

Topics

Personal or family member illness

Anatomy Lab

Other student topics

Teamwork / relationships

Clinical experience

Leadership and responsibility

Other (garden, public health, shyness)

★ *EMT experience*

Medical Student EMT Program

Clinical Reflections

★ EMT experience

2012

<u>Semester</u>	<u>Tot</u>	<u>Pos</u>	<u>Neg</u>
1 - mid	10 / 53 (19%)	8	2
1 - end	21 / 52 (40%)	15	6
2 - mid	20 / 52 (39%)	17	3
2 - end	17 / 52 (33%)	15	2

Medical Student EMT Program

Clinical Reflections

★ EMT experience

	2012			2013		
Semester	Tot	Pos	Neg	Tot	Pos	Neg
1 - mid	10 / 53 (19%)	8	2	28 / 54 (52%)	12	1
1 - end	21 / 52 (40%)	15	6	10 / 54 (19%)	7	3
2 - mid	20 / 52 (39%)	17	3			
2 - end	17 / 52 (33%)	15	2			

Medical Student EMT Program



Charter Class of 2016



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