

**Colorado Mesa University**

**EMS Program Review**

**2010—2015**

**Department of Health**

**Sciences**

**2-20-2016**

## **Introduction and Program Overview:**

The Emergency Medical Technician-Basic (EMT-B) program represents the first component of the Emergency Medical Technician system. Through Colorado Mesa University's comprehensive one-semester, three-course program an EMT-B is trained to care for patients at the scene of an accident and while transporting patients by ambulance to the hospital under medical direction. The EMT-B has the emergency skills to assess a patient's condition and manage respiratory, cardiac, and trauma emergencies. EMT-Basic coursework typically emphasizes emergency skills, such as patient assessment, and managing respiratory, trauma, and cardiac emergencies. Formal courses are combined with skills practice and time in an emergency room or ambulance for a total of 195 contact hours.

The program also provides instruction and practice in dealing with bleeding, fractures, airway obstruction, cardiac arrest, and emergency childbirth. Students learn how to use and maintain common emergency equipment, such as backboards, suction devices, splints, oxygen delivery systems, and stretchers. Graduates of approved EMT-Basic training programs who pass a written and practical examination administered by the State certifying agency or the National Registry of Emergency Medical Technicians (NREMT) earn the title "Registered EMT-Basic." The course also is a pre-requisite for EMT-Intermediate and Paramedic training.

The EMT-Basic initial education was transferred to the Mesa State College from St. Mary's Hospital when the hospital reorganized its EMS Outreach program in 2007. This paved the way for the college to recruit a program director and faculty to make EMS education a regular offering of the Health Sciences Department (DHS). In 2007, Daniel Barela was hired to coordinate the EMS programs and Dr. Kent Black as the EMS medical director. Fidel Garcia, was hired as the first full time faculty member of the program and the EMT-Basic classes were launched.

Currently, Pam Holder is the Program Director of the EMR and EMT program. Pam holds a B

The program added a Paramedic component in 2008. Six Paramedic programs were run from 2008-2013. See Program Evaluation under Paramedic program.

EMS Mission Statement: We inspire, educate and empower caregivers and leaders of tomorrow's EMS system with lessons in character and in caring. We teach the knowledge, skills and behavior that define a competent entry-level EMS provider.

- 1) Instill confidence in students
- 2) Provide a positive learning environment
- 3) Promote patient ethics and patient advocacy

The mission statement above is the basis for our policies, goals and objectives. Our program is committed to assuring that our students graduate ready to take their place in the Emergency Medical Services community. Whether at the EMR or the EMT level they will graduate from this program ready to be productive professionals in the continuum of healthcare. This requires a high academic standard, a positive attitude and personal accountability. It is our goal to promote these attributes in all aspects of our EMS education program and the learning environment. It is the goal of the EMS education to instill an appreciation for the importance of life-long learning; to teach to the most current standards of patient care; to advance evidence-based practices; to model what we teach; and to provide a safe and stimulating learning experience. The CMU EMT program has developed a rigorous program using the most current national standards and follows best practices as outlined by Mesa County. The program adheres to the following Goals and Standards:

### **Graduate competent entry-level EMS providers**

1. Promote our values in all education activities
2. Prepare students to be leaders
3. Prepare students to be life-long learners
4. Teach to the most current standards of care
5. Promote evidence based medicine
6. Model what we teach
7. Teach in a safe and stimulating environment

### **Curriculum**

The Colorado Mesa University Emergency Medical Services Program curriculum strictly follows the National Standards as set by the National Registry of Emergency Medical Technicians. Students are required to meet the National EMS Education Standards, led by the National Association of EMS Educators. The Standards define the competencies,

clinical behaviors, and judgments that must be achieved by entry-level EMS personnel to meet practice guidelines defined in the National EMS Scope of Practice Model. Content and concepts defined in the National EMS Core Content are also integrated within the course curricula.

The primary focus of the Emergency Medical Responder course is to provide basic knowledge of emergency medical care and transportation for critical and emergent patients who access the emergency medical system. Students are taught how to initiate immediate lifesaving care and interventions while awaiting additional EMS response and to assist higher level personnel at the scene and during transport. Emergency Medical Responders function as part of a comprehensive EMS response, under medical oversight. The Emergency Medical Responder student who has completed the course will possess the basic knowledge and skills necessary to provide patient care and transportation of the sick and injured, and be able to perform basic interventions with the basic equipment typically found on an ambulance. As a trained entry-level Emergency Medical Technician the successful student will be proficiently trained as a link from the scene to the emergency health care system.

In order to provide a rigorous program, the curriculum consists of 200 hours of didactic and clinical hours. Students are instructed in a wide variety of ways including lectures, group presentations, interactive activities, field clinical experiences within local hospitals, and third ride time with fire departments. Since our last program review, we have responded to suggestions by adding a lab for more one-on-one skills practice at the request of students, and a trip to the 911 Communications Center to enhance the student awareness of how communication is handled in the emergency services network. We have also added a class during the day along with the one in the evening to accommodate both the college student base and the local fire agencies who needed more course time choices. Individuals who work and have families also needed more class choices. Since this course addition, we have a full load in both courses in the spring and the fall semesters.

The depth and breadth of the curriculum for both the EMR program and the EMT program meets all national standards and requirements for Emergency Medical Technician and Emergency Medical Responder courses, while also maintaining the rigor of Colorado

Mesa University's academic programs. All Emergency Responder courses offer a simple breadth and depth to its curriculum with a national standard to its discipline. The Emergency Medical Technician curriculum varies from a simple breadth and depth to a more foundational and fundamental knowledge base. A few of the sections taught within the curriculum and their perspective depths and breadths are listed below:

See also Appendix A for EMT Student Handbook.

### **Preparatory**

EMR -uses simple knowledge of the EMS system, safety/well-being of the EMR, medical/legal issues at the scene of an emergency while awaiting a higher level of care.

EMT- Applies fundamental knowledge of the EMS system, safety/well-being of the EMT, medical/legal and ethical issues to the provision of emergency care.

#### EMS Systems

EMR- Simple depth, simple breadth • EMS systems • Roles/ responsibilities/ professionalism of EMS personnel • Quality improvement

EMT- EMR Material PLUS: Simple depth, foundational breadth • EMS systems • History of EMS • Roles/ responsibilities/ professionalism of EMS personnel • Quality improvement • Patient safety.

#### Workforce Safety and Wellness

EMR- Simple depth, simple breadth • Standard safety precautions • Personal protective equipment • Stress management -Dealing with death and dying • Prevention of response-related injuries • Lifting and moving patients

EMT- EMR Material PLUS: Fundamental depth, foundational breadth • Standard safety precautions • Personal protective equipment • Stress management - Dealing with death and dying • Prevention of work related injuries • Lifting and moving patients • Disease transmission •Wellness principles

#### Documentation

EMR-Simple depth, simple breadth • Recording patient findings

EMT- EMR Material PLUS: Fundamental depth, foundational breadth • Principles of medical documentation and report writing.

#### EMS System Communication

EMR-Simple depth, simple breadth. Communication needed to • Call for Resources • Transfer care of the patient • Interact within the team structure.

EMT-EMR Material PLUS: Simple depth, simple breadth • EMS communication system • Communication with other health care professionals • Team communication and dynamics  
Medical/Legal and Ethics

EMR-Simple depth, simple breadth • Consent/refusal of care • Confidentiality • Advanced directives • Tort and criminal actions • Evidence preservation • Statutory responsibilities • Mandatory reporting • Ethical principles/moral obligations • End-of-life issues

EMT- EMR Material PLUS: Fundamental depth, foundational breadth • Consent/refusal of care • Confidentiality • Advanced directives • Tort and criminal actions • Evidence preservation • Statutory responsibilities • Mandatory reporting • Ethical principles/moral obligations\*End of life issues

Anatomy and Physiology

EMR-Uses simple knowledge of the anatomy and function of the upper airway, heart, vessels, blood, lungs, skin, muscles, and bones as the foundation of emergency care.

EMT- Applies fundamental knowledge of the anatomy and function of all human systems to the practice of EMS. Integrates complex knowledge of the anatomy and physiology of the airway, respiratory and circulatory systems to the practice of EMS.

Medical Terminology

EMR-Uses simple medical and anatomical terms.

EMT-Uses foundational anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals.

Patho-physiology

EMR-Uses simple knowledge of shock and respiratory compromise to respond to life threats.

EMT-Applies fundamental knowledge of the path-physiology of respiration and perfusion to patient assessment and management.

Life Span Development

EMR-Uses simple knowledge of age-related differences to assess and care for patients.

EMT-Applies fundamental knowledge of life span development to patient assessment and management.

## Public Health

EMR-Have an awareness of local public health resources and the role EMS personnel play in public health emergencies.

EMT-Uses simple knowledge of the principles of illness and injury prevention in emergency care.

## Pharmacology

EMR-Uses simple knowledge of the medications that the EMR may self-administer or administer to a peer in an emergency.

EMT- Applies fundamental knowledge of the medications that the EMT may assist/administer to a patient during an emergency.

## Medication Administration

EMR- Simple depth, simple breadth .Within the scope of practice of the EMR, how to • Self-administer medication • Peer-administer medication

EMT-EMR Material PLUS: Fundamental depth, foundational breadth .Within the scope of practice of the EMT how to • Assist/administer medications to a patient.

## Airway Management Respiration and Artificial Ventilation

EMR-Applies knowledge (fundamental depth, foundational breadth) of general anatomy and physiology to assure a patent airway, adequate mechanical ventilation, and respiration while awaiting additional EMS response for patients of all ages.

EMT- Applies knowledge (fundamental depth, foundational breadth) of general anatomy and physiology to patient assessment and management in order to assure a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.

## Respiration

EMR-Fundamental depth, simple breadth • Anatomy of the respiratory system • Physiology and patho-physiology of respiration o Pulmonary ventilation \* Oxygenation \* Respiration • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy

EMT- EMR Material PLUS: Fundamental depth, foundational breadth • Anatomy of the respiratory system • Physiology and patho-physiology of respiration \* Pulmonary ventilation o Oxygenation o Respiration *f* External *f* Internal *f* Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy

## Scene Size-Up

EMR- Complex depth, comprehensive breadth • Scene safety Fundamental depth, foundational breadth • Scene management o Impact of the environment on patient care \* Addressing hazards \* Violence \* Need for additional or specialized resources \* Standard precautions

EMT-EMR Material PLUS: Fundamental depth, foundational breadth • Scene management \* Multiple patient situations

## Primary Assessment

EMR-Simple depth, simple breadth • Primary assessment for all patient situations \* Level of consciousness o ABCs \* Identifying life threats \* Assessment of vital functions • Begin interventions needed to preserve life

EMT- EMR Material PLUS: Fundamental depth, simple breadth • Primary assessment for all patient situations \* Initial general impression \* Level of consciousness \* ABCs \* Identifying life threats \* Assessment of vital functions • Integration of treatment/ procedures needed to preserve life.

Partnership with many hospitals and organizations in the region support the EMT program. The partnerships help train EMT for many positions including volunteer positions in rural settings. In 2015, forty-two graduates were surveyed for job placement through the V 135 survey questionnaire for vocational programs. Twenty-nine reported having jobs in the field, however seventeen of the twenty-nine were part time work.

In 2014, twenty-two graduates were surveyed and nineteen reported having work, with only five being employed part time. It is unclear if the market is being saturated or the graduate characteristics have changed. EMT, EMR and wilderness survival programs are popular in areas such as western Colorado, where opportunity to be in outdoor settings that create risk for injury occur. Many students take these programs to be prepared for life adventures rather than employment.

## **Analysis of Student Demand and Success:**

The EMT-B has been a thriving program since its inception. The Program change in 2013 led to a new program Director, Pam Holder. Pam was instrumental in growing the EMT-B to 3 programs in 2014-2015 and 4 EMT-B programs in 2015-2016 academic years. A partnership with Kinesiology resulted in many of the athletic trainer seniors completing the

EMT-B program as part of their degree. The overall growth of the program was 179% for the EMT-B.

The EMT-B remains the program of choice for EMS systems. The demand for EMT-B is seen in the rural area in paid positions as well as volunteer positions. Additional certification for many occupations has led to the demand of the program also. Careers with occupational hazardous such as oil workers, coal miners and outdoor employment are requiring some personal to complete EMT-B programs.

Employment of emergency medical technicians (EMTs) and paramedics is projected to grow 24 percent from 2014 to 2024, much faster than the average for all occupations. Emergencies, such as car crashes, natural disasters, and acts of violence, will continue to create demand for EMTs and paramedics. Demand for part-time, volunteer EMTs and paramedics in rural areas and smaller metropolitan areas will also continue. Growth in the middle-aged and elderly population will lead to an increase in age-related health emergencies, such as heart attacks and strokes. This increase, in turn, will create greater demand for EMT and paramedic services. An increase in the number of specialized medical facilities will require more EMTs and paramedics to transfer patients with specific conditions to these facilities for treatment.

Below are the enrollment statistics for CMU EMT and Paramedic programs. The interest remains high in the programs in the pre courses, however enrollment and retention in the paramedic program led to its closure in 2013. Six paramedic courses were completed with 25 graduates of the program in 2008-2013. The EMT enrolled and graduated 252 students in the same time period.

Department Health Science

Pro- Gra m	Degree	Code	Major	2010-11		2011-12		2012-13		2013-14		2014-15			
				1 <sup>st</sup> Major	All	1 <sup>st</sup> Major	All	1 <sup>st</sup> Major	All	1 <sup>st</sup> Major	All	1 <sup>st</sup> Maj or	All		
EMT	AAS	1634	Pre-EMT	29	39	40	59	57	72	19	28	5	11		
			EMT-	2	5	6	7	8	10	2	2	1	2		
			Tech	11	14	4	6	1	5	3	5	2	7		
			Cert	1633	Pre-EMT	11	14	4	6	1	5	3	5	2	7
			EMT-	1631	Basic	6	45	3	57	9	61	4	37	4	52
			Pre-EMT	1635	Paramedic	5	11	9	17	4	11	4			1
		1636	EMT- Paramedic	2	4		1	1	8	3			4		
Sub- total				55	118	62	147	80	167	28		12	77		

As stated before, the EMT-B program remains in demand and growth is not slowing at this point. The Paramedic Program is being brought back through Western Colorado Community College and the demand is yet to be determined.

**4. Program Resources**

Faculty has determined the expected outcomes of the Emergency Medical courses and the acceptable level of performance as required from National Registry EMT standards. Indirect assessment is performed with interviews, surveys/questionnaires, and job placement/continuing education data. In addition to this, biannual information is gathered from local fire department agencies, hospitals and hiring facilities for job opportunities and hiring trends. Information from registration shows that with the influx of students coming to CMU from other states, there has been a heightened interest and registration for pre-hospital care programs, creating a need to offer a variety of emergency medical courses. During the 2015 spring semester, Colorado Mesa University had 30 applicants for the EMT and EMR programs, reflecting an increase from the previous 18 total applicants during the spring and fall of 2014. The 2016 spring semester had a total of 52 applicants for the EMT

and the EMR programs. This increase of interest in pre-hospital care, validates the need for more options in the courses available to CMU students.

All faculty members have at least 5 years of field experience and hold valid certifications above the level that they are instructing. They also have State certifications for the courses they are teaching. All paid employees have obtained, or are in the process of completing, credentialing through WCCC.

- (1) Emergency Medical Technician courses are taught with a ratio of 1 full-time faculty to 20 full-time student load for didactic instruction and 1:6 ratio for clinical instruction.
- (2) Non-tenured faculty teaches courses. The Program Director along with two part-time instructors provide instruction for the two 10 credit hour courses.
- (3) The Program Director also instructs the 3 credit hour Emergency Medical Responder (EMR) course. There are 2 volunteer instructors who aid in the skills labs. The course consists of 180 hours of classroom time that includes hands-on skills training sessions. The student must also schedule, outside of class time, an in-hospital emergency department rotation where
- (4) Emergency room personnel proctor EMT students; they will observe and assist with the assessment and management of patients. The student will also have the opportunity to experience the pre-hospital setting where they will be proctored by professional ambulance crews on how to provide pre-hospital care to the sick and injured.

#### **Faculty Successes:**

Program Director:

- Received recognition from President Foster and Department Head, Debra Bailey for program increase of 866% while under PD administration.
- Increased EMT program from 1 class during the spring semester and 1 class during the fall, to 2 classes during each semester.
- Established an inter-department collaboration with the Department Head of Kinesiology for Athletic Training students to take EMS courses within their cohort.
- Established a HOSA network with WCCC students and CMU students to provide mentorship and competitive opportunities for students of both campuses.

- Revised the teaching methodology within all EMS courses to better utilize the concept of “flipping the class” and improve student learning outcomes.
- Improved National Registry exam scores from 81% cumulative pass within 3 attempts to 86%.
- Received award from students in fall of 2015 for going above and beyond in helping two students successfully pass the EMT program after they had significant personal issues in their lives.

### **Instructors**

- Students have written positive evaluations on instructors.
- Instructors have been known to come into the school during their time off with no pay to work with students and increase their success on skill evaluations.
- A student who had a physical disability was given one-on-one training with one instructor, on weekends and on the instructor’s days off, to increase the students knowledge base and provide more practice so that he could learn to do the required skills with his disability.
- One instructor encouraged a young man who was struggling in his academic performance to make goals and pursue them to better himself and improve life skills. This young man has since completed his EMT certification and gone into the military as a medic.

### **Curriculum Vitas: See Appendix B**

A. **Financial Aid** information regarding increases and decreases and their related factors, information on revenue and expenses, expenses related to credit hours, and external funding sources if any.

The EMT certificate that is 10 credit hour in length is not eligible for Federal or state financial aid as it does not meet the minimum requirement for aid. The state of Colorado has a short-term program to assist with tuition for Pell Eligible students that are in a program that does not meet federal requirement for aid called the Continuing Technical Education Grant (CTE) that a student could qualify. The program is only authorized for this academic year. The Paramedic certificate and the AAS are eligible for federal and state financial aid.

## B. Library assessment

### Library Program Assessment

John U. Tomlinson Library  
Colorado Mesa University

Date of Assessment: November 4, 2015

Purpose of Assessment: Program Review

Program under review: EMT

Program Level/s: Basic Certificate

Liaison: Barbara Borst

#### 1. Collection Assessment

Collection development is the joint responsibility of the EMS faculty and the Health Sciences Librarian. Review slips and new title lists are sent to the faculty each month for their review. Titles recommended are sent to the librarian who reviews them and sends them on for purchase as money allows. The librarian keeps the existing titles current and may select from various selection tools including Doody's Core Titles. We started building the collection in 2006 and have continued to build and review the collection each year. An average of 8-10 titles are added yearly. Additionally there is overlap with titles purchased for the Nursing and Athletic Training programs. A strong base has been established in both print and online resources.

##### a. Reference Support:

Taber's Cyclopedic Medical Dictionary 21<sup>st</sup> ed. 2009

Mosby's Dictionary of Medicine, Nursing & Health Professions 9<sup>th</sup> ed. 2013

Stedman's Medical Dictionary for the Health Professions & Nursing 7<sup>th</sup> ed. 2012

Dorland's Illustrated Medical Dictionary 32<sup>nd</sup> ed. 2012 (e-book)

Melloni's Illustrated Dictionary of the Musculoskeletal System 1998

Gray's Anatomy 40<sup>th</sup> ed. 2008

Grant's Atlas of Anatomy 12<sup>th</sup> ed. 2009

Atlas of Emergency Medicine 2<sup>nd</sup> ed. 2002

##### b. Monographic Sources

The monograph collection is being developed with both print and electronic books. The Springer E-book collection contains numerous titles pertaining to emergency medical services/personnel and to specific areas of emergency/prehospital care. Additionally, there are other titles available electronically through the Demand Driven Acquisition program CMU participates in with other academic libraries in Colorado.

The collection was assessed using a combination of call number, keyword and subject searches.

Call number areas were: RC 86.7-86.9 Medical emergencies  
RC 87.9 CPR  
RA 645.5 Emergency medical services  
RJ 370 Pediatric emergencies

Subject headings & keywords used: CPR  
 First aid in illness & injury  
 Emergency medical services  
 Emergency medical technicians  
 Paramedics  
 Emergency medicine  
 Prehospital

Because a book may be accessed through more than one of the above searching techniques, a title may appear in more than one chart. The searches generated the following snap shot of books available:

- Age Analysis

EMT	Print	E-book
2010-present	10	1
2005-2009	7	
2000-2004		
Pre 2000		
Total	17	1

Paramedic	Print	E-Book
2010-present	4	2
2005-2009	3	
2000-2004		
Pre 2000		
Total	7	2

Emergency Medical Services	Print	E-book
2010-present	6	4
2005-2009	12	1
2000-2004	3	
Pre 2000		
Total	21	5

Prehospital	Print	E-Book
2010-present	6	6
2005-2009	2	
2000-2004	1	
Pre 2000		
Total	9	6

CPR	Print	E-book
2010-present	4	
2005-2009	4	1
2000-2004	1	
Pre 2000	1	
Total	10	1

First aid in illness & injury	Print	E-Book
2010-present	11	
2005-2009	6	
2000-2004		
Pre 2000		
Total	17	

Emergency Medicine	Print	E-book
2010-present	23	37
2005-2009	17	5
2000-2004	4	
Pre 2000		1
Total	44	43

RC 86.7-86.9 and RJ 370	Print	E-Book **
2010-present	29	
2005-2009	16	
2000-2004	5	
Pre 2000		
Total	50	

\*\* Call number searches only generate print titles not e-book titles

As a partial government depository, the Library also makes available a large number of federal documents published by the Department of Health and Congress. These are available in a variety of formats – paper, microform, CD and online.

c. Electronic Resources

Indexes for articles on all aspects of emergency medical services:

- CINAHL
- Medline
- Informa Health Care
- Science Direct
- Wiley Online Library
- Sage Premier Collection

d. Periodicals

The Library has a strong base for journal research with 1 print subscription and online access to many titles through the online journal packages and the full-text access in the databases. Articles from titles available in the aggregator databases that have a 6 or 12-month embargo on the full-text are available through Inter Library Loan. Additionally, links are provided for titles available in PubMed Central.

Online (unless specified):

- Academic Emergency Medicine
- Annals of Emergency Medicine
- Emergency Medicine International
- Emergency Medicine Journal: EMJ (6 month embargo)
- International Journal of Emergency Medicine
- Journal of Academic Emergency Medicine
- Journal of Emergency Medical Services: JEMS (paper)
- Journal of Emergency Nursing
- Journal of Paramedic Practice
- Journal of Paramedical Sciences
- Prehospital Emergency Care
- Trauma
- Western Journal of Emergency Medicine

e. Media

The Library subscribes to Films on Demand – a streaming video service from Films Media Group. This service includes educational videos, documentaries, and PBS publications. Representative titles for this program include:

- Anaphylaxis: What You Should Know about an Allergic Emergency. 27 min. 2012
- Myocardial Infarction. 25 min. 2012
- Basic First Aid. 58 min. 2011
- EMT. 22 min. 2008

The DVD collection includes 2 titles for EMS:

- History of Modern EMS: Making a Difference. 60 min. 2004
- You Are the EMT. 289 min. 2005

f. Additional Resources

Journal literature not available through Colorado Mesa University, including those titles not available because of publisher embargo, can be provided by the Interlibrary Loan Department. Article requests are provided through 2 programs, RapidILL and OCLC Resource Sharing. RapidILL gives access to journal collections in many academic libraries of all sizes. The average amount of time it takes to fill an article request is 12 hours. Most requests are filled through this program. Beyond that, OCLC Resource Sharing gives access to library collections world-wide. Both of these programs also provide book chapters as scanned documents.

Books and media not owned by Colorado Mesa University can be borrowed from other libraries through Prospector – Colorado libraries plus University of Wyoming, or OCLC Resource Sharing – libraries worldwide. Prospector books arrive in about 3 working days via the statewide library courier service.

2. Evaluation of the total collection
  - a. Strengths
    - Good budget support
    - Currency of monograph collection – 61% since 2010, 40% since 2012
    - Variety of indexing services available for journal articles
    - Good selection of journals available electronically
  - b. Weaknesses
    - Increased active participation by faculty in selection process would strengthen the quality of selection.
    - 40% of monograph collection 5-10 years old
3. Recommendations
  - Review materials published pre-2010 for continued relevancy and accuracy
  - Check for new editions of standard titles
  - Encourage faculty to participate in selection process

Library Director: Sylvia L. Rael Date: 11/4/15

### **Facilities:**

The Clinical Education Center (CEC) is home to low and high fidelity simulation. The four labs are equipped with two state of the art simulation manikins. There are EKG monitors, equipment to perform all needed skills and replacement equipment for items that are regularly used. There is one ambulance that is functional and used in all EMS courses, on community events and with school district 51 class requests. A second ambulance is used between the CMU campus and the WCCC First Responder course.

The CEC lab rooms are set up with hospital type beds for hands-on learning experiences for all EMS students. Emergency Medical Technician and Emergency First Responder students are provided with one “crew” kit for every 5 students. These kits are filled with necessary equipment for their practical application of the lecture topics. The student’s use these while they are in class and also while they are in the CEC lab running scenarios. Kits have items such as blood pressure cuffs, stethoscopes, bandaging supplies, medications and pen lights. The CEC lab is equipped with replacement supplies as these are used and are purchased through student fees. Class crews also have 3 airway kits to use in the airway management scenarios. Each of these kits have an

oxygen bottle, regulator, nasal cannulas, non-rebreathers and bag valve mask devices. The CEC lab has bedside suction units, 6 backboards with straps, 2 sagar splints, 1 full body vacu-splint with 6 varying sizes of extremity vacu-splints. Other supplies include CPR manikins, AED's, one adult airway manikin, one pediatric airway manikin, one obstetrical manikin with one obstetrical kit for delivering the newborn. There are two older style gurneys and one newer Stryker gurney, and there is also one stair chair for practice in moving patients.

Resources are adequate to ensure the attainment of student learning and program outcomes. The majority of the CMU budget comes from the general fund which is based on full-time equivalent students (FTE's). Funds are distributed to the Director of Health Sciences by the Office of Academic Affairs. The funds are then allocated by the DHS Director for each program. Student fees are assessed in courses that have labs to purchase lab kits and replenish disposable supplies as needed. Further augmentation of the budget may be initiated by special funds and grant dollars.

Physical resources are sufficient to ensure the achievement of the program outcomes and meet the needs of faculty, staff, and students. DHS is located in the Maverick Center. All faculty have offices with a computer, telephone, and file cabinets. There is a conference/break room within the health sciences office. The conference room is equipped with AV capable equipment (overhead projection screen or flat screen TV) which can be connected to a computer/laptop and DVD/VCR for presentation purposes. Each classroom is equipped with a computer, a DVD/VCR combination player, a data projector and screen, amplifiers and speakers.

#### b) Information on facilities (New)

Construction has begun on a portion of the soon-to-be vacated Community Hospital building that will become the home of Colorado Mesa University's health sciences program. Community Hospital administrators have moved into temporary quarters across 12<sup>th</sup> Street, enabling work to be done on the two-story, northeast portion of the building. Remodeling of that portion is the first step in a \$14.7 million project to revamp the building and property for use by CMU's health sciences program.

Community Hospital plans to move into its new facility at 2351 G Road in mid-March. Colorado Mesa purchased the eight-acre site on North 12<sup>th</sup> Street between Orchard and Walnut avenues for \$7.1 million under an agreement reached between the two in 2011. CMU has made use of other parts of the property for such things as an apartment-style residence hall.

CMU will demolish about 50,000 square feet of the older portions of the hospital building, remodel 24,000 square feet and add about 10,000 square feet in new construction. The eastern portion of the project, which includes classroom and staff space is slated for completion by Jan. 1, 2017 with the remainder done by August 2017. It will include more classrooms and instructional laboratories. There will also be changes to the grounds that will include green spaces and an intramural field.

This project is necessary to provide needed classrooms and critical lab space to educate and health science professionals who want to serve Colorado. Expanding the undergraduate and graduate health science programs at Colorado Mesa University will increase employable graduates available and help Colorado take a step toward meeting the internal capacity to educate health care workers and meet the needs of Colorado residents. CMU currently turns away well over ½ of the applicants to the programs due to capacity. The state allocated \$3 million toward this project last year. CMU is contributing a little more than \$2 million and is requesting the remaining \$9.2 million from the state to complete the on-going project. The clinical education labs account for more than half of the expansion.

c) Information on technology and equipment

The EMS program uses the most modern technology and equipment. Supplies are rotated out of service as they become obsolete and new technology is incorporated into the course curriculum. Supplies and equipment are stocked each semester for student needs. Faculty attend leadership training once a year for information on new technology within the EMS system so that they can be up to date and current on the information they are teaching. All resources are current for both faculty and students. Updates in fall of 2014, of both email and Microsoft office was updated. Online resources through D2L, Ponopto, and videoconferencing of some lectures are current. Learning resources, such as the library and Learning Resource Center, are current and comprehensive. The library meets the needs of the faculty and staff through classic and contemporary books, journals and bound periodicals, videos, CD-ROMS, online reserve sources online search engines and full text electronic journals. Faculty have input into the selection, development, and maintenance of learning resources. Electronic access to reserve the above resources is available to students and faculty. Please see the Library assessment for EMS.

d) Efficiency of operation

EMS courses have always run with very high levels of efficiency of operation. All staff members are active members of the pre-hospital emergency services and are experienced instructors in Medical and Fire service operations courses. All instructors are trained at or above the level of course that they instruct and all instructors have a State Instructor certification. Student outcome data reflects a high level of competency after taking these courses. EMS courses are operated with strict adherence to State and National standards, as well as Colorado Mesa University policy.

**5. Student Learning Outcomes and Assessments:**

a. CMU Emergency Medical Technician Certification and Emergency Medical Responder

Student Learning Outcomes

In order to contribute to the institution-wide student learning outcomes the Emergency Medical Technician program encourages each student to perform at their best. All faculty members promote student success and teach so that each graduate will be able to:

1. Gather, identify and organize information on an EMS based topic addressing a course or discipline-related injury or illness. (Applied Learning; Specialized Knowledge)
2. Gather information and establish correct procedures and medications. Use program-level data and methods to understand, analyze, and explain issues in quantitative terms. (Intellectual Skills – Quantitative Fluency)
3. Collect and develop information in a well-organized, professional document and/or oral presentation that is appropriate for a specific audience. (Intellectual Skills – Communication Fluency)
4. Identify and gather the information/data relevant to the essential question, issue, and/or problem and develop informed conclusions.  
(Intellectual Skills – Critical Thinking)
5. Demonstrate error recognition and the ability to correctly interpret patient signs and symptoms, and establish a course of action to solve problems and improve patient outcome. (Specialized Knowledge/Applied Learning)

b. CMU Emergency Medical Technician Certification and Emergency Medical Responder faculty has determined the expected outcomes of the course and the acceptable level of

performance as required from National Registry EMT standards. To measure if learning is taking place during the course assessment is embedded into the normal activities of the program. Direct assessments of the student are made the following ways: Writing activities, students are asked to write an eight page research paper on any topic they choose within the emergency medical field; multiple choice questions; essay questions blind scored by faculty across the department; group oral presentations; standardized tests; projects; clinical experiences; simulations; and class scenarios. Indirect assessment is performed with interviews, surveys/questionnaires, and job placement/continuing education data.

Faculty will show respect and consideration for all students and, conversely, all students are expected to show respect for each other and the course instructors, preceptors, CMU staff, classroom guests and ancillary healthcare workers. The student is expected to be in class, ready for course work, at each designated class time. Pagers and cell phone use will not be permitted in class; these must be kept silent and checked only during regular breaks. Each faculty member completes careful assessment and evaluation of these goals after each semester to enhance improvement and development of the program. Each faculty member is involved in on-going assessment of student learning outcomes to measure program effectiveness and provide a plan for continuous improvement. This is done with careful charting and record keeping of each student's performance and improvement throughout the course. Students receive a one-on-one meeting with their instructor to discuss their performance and set goals for improvement at the midterm and then again prior to final week.

Admission and progression in the program requires that students maintain a GPA in related coursework at or above a 2.3. This standard is consistent with all other Health Science Programs. Examinations will be administered to evaluate student achievement. Multiple examinations will be given and will include information contained in the block of information covered prior to the examination. The final examination will cover all material contained in the program. Practical exams including skills check-offs will occur at various times throughout the course to document skill proficiency.

Direct and indirect measurements that are used to assess student-learning outcomes:

Didactic: Academic requirement for completion is 80% grade average.

Skills: Demonstrate proficiency in all NREMT required skills and documented by sign-off sheets

Clinical: Demonstrate completion of clinical rotations by documented National Registry sign-off sheets.

Clinical Rotations: All clinical hours must be completed and documented by the instructor prior to final practical testing; failure to do so will result in a failing grade and you will not complete the requirements for certification. Incompletes are only allowed when there are extenuating circumstances.

Students are evaluated upon their successful completion of the following;

Emergency Department

Twelve hours of clinical rotation in an approved emergency department /or facility.

Documentation of clinical time will be required. (See course information packet).

Third Rider

12 hours with an approved fire department, private ambulance or both. Field patient contact will require a trip report. (See course information packet)

Patient Contacts

A minimum of 15 patient contacts must be documented and written in SOAP.

Other sources of measurement include the NREMT site that shows the course pass/fail rate against the national average:

A 5-year report shows CMU with an 86% pass rate for their students.

Attempted the exam: Number of graduates that make at least one attempt at the exam.

First attempt pass: Number and percent of those who attempt the exam that pass on the

first attempt. Cumulative pass within 3 attempts: Number and percent of those who

attempt the exam who pass on the first, second, or third attempt. Cumulative pass within

6 attempts: Number and percent of those who attempt the exam who pass on the first,

second, third, fourth, fifth, or sixth attempt. Failed all 6 attempts: Number and percent of those who fail the exam six times.

Eligible for retest: Number and percent of those who failed their last attempt, but remain eligible for retest (less than six attempts, less than two years from course completion.)

Did not complete within 2 years: Number and percent of those who fail their last attempt and are no longer eligible for retest (more than two years from course completion). The

EMS Program Director did assess that some of the Athletic Training students are only taking the course for credit hours and not for a career in Emergency Medicine that could be having an effect on these outcomes. The CMU EMS VE 135 research found in 2014 that out of 22 students, 18 had employment either part time or full time within 6 months of leaving the course. This is an 82% placement on the field of study. 3 of those who are not counted were unreachable with their contact information. Since that report was conducted one student has called in to advise of his recent employment in a full time capacity on a Fire department. Please see report below.

NREMT Report of Examinations for EMT-B

Report Date: 2/4/2016 11:58:16 AM  
 Report Type: Program Report (CO-069)  
 Registration Level: EMT-Basic / EMT  
 Course Completion Date: 1st Quarter 2009 to 4th Quarter 2015  
 Training Program: Colorado Mesa University (CO-069)

Attempted The Exam	First Attempt Pass	Cumulative Pass Within 3 Attempts	Cumulative Pass Within 6 Attempts	Failed All 6 Attempts	Eligible For Retest	Did Not Complete Within 2 Years
173	74% (128 / 173)	86% (148 / 173)	86% (149 / 173)	0% (0 / 173)	7% (12 / 173)	7% (12 / 173)

Course Grades:

Successful completion of each course in the program is based on the total score of the exams, homework and quizzes, class participation, individual assignments and group assignments as stated on the course syllabus.

Letter grades and GPA will be based on the following scale for all EMS Courses:

Letter Grade	Point Scale
A	94-100%
B	87-93%
C	80-86%
D	73-79%
F	Below 73%
I	See CMU Policy

<b>CMU EMR Student Learning Outcomes</b>	<b>Department of Health Sciences Student Learning Outcomes</b>	<b>CMU EMT Program Student Learning Outcomes</b>
<p>Gather, identify and organize information on an EMS based topic addressing a course or discipline-related injury or illness</p> <p>(Applied Learning; Specialized Knowledge)</p>	<p>Locate, gather, and organize evidence on an assigned topic addressing a course or discipline-related question or a question of practice in a work or community setting (Applied Learning; Specialized Knowledge)</p>	<p>Demonstrate the theoretical knowledge and practical skills in the performance of patient assessment and develop a proper treatment plan</p> <p>(Specialized Knowledge/Applied Learning)</p>
	<p>Demonstrate safe, evidence-based, competent practice. (Applied Learning)</p>	<p>Demonstrate skills according to NREMT standards in safety, professional behavior and ethical conduct. Demonstrate safe, evidence-based, competent practice. (Specialized Knowledge/Applied Learning)</p>
<p>Gather information and establish correct procedures and treatment. Use program-level data and methods to understand, analyze, and explain issues in quantitative terms. (Intellectual Skills – Quantitative Fluency)</p>	<p>Demonstrate safe, evidence-based, competent practice. (Intellectual Skills – Quantitative Fluency)</p>	<p>Apply learned standard of care skills and procedures to ensure the proper care and dosage of medications. Demonstrate proper medication administration skills. (Quantitative Fluency)</p>
<p>Collect and develop information in a well-organized professional document and/or oral presentation that is appropriate for a specific audience. (Intellectual Skills – Communication Fluency)</p>	<p>Demonstrate effective communication and information technology skills. (Intellectual skills – Communication fluency)</p>	<p>Communicate courteously and effectively with Dispatch personnel, other health care professionals, patients and with the public. Demonstrate proper communication skills between student and physicians when obtaining medication orders. (Communication Fluency)</p>
	<p>Demonstrate leadership, collaboration, teamwork, and conflict resolution. (Intellectual skills – Communication fluency)</p>	
<p>Identify and gather the information/data relevant to the essential question, issue</p>	<p>Engage in critical and creative thinking in complex problem solving.</p>	<p>Demonstrate error recognition and the ability to correctly interpret patient signs and symptoms, and establish a</p>

<p>and/or problem and develop informed conclusions. (Intellectual Skills – Critical thinking)</p>	<p>(Intellectual Skills – Critical Thinking)</p>	<p>course of action to solve problems and improve patient outcome. Engage in critical and creative thinking in complex problem solving (Critical Thinking)</p>
	<p>Demonstrate cultural sensitivity, advocacy, civic engagement, and community service. (Civic Engagement)</p>	

COLORADO MESA UNIVERSITY  
Curriculum Map for Emergency Medical Technician

Program Outcomes	EMTS 115	EMTS 101	EMTS 102	EMTS 103
<p>Outcome #1</p> <p>Demonstrate the theoretical knowledge and practical skills in the performance of patient assessment and develop a proper treatment plan. (Specialized Knowledge/Applied Learning)</p>			X	X
<p>Outcome #2</p> <p>Demonstrate skills practice according to NREMT standards in safety, professional behavior and ethical conduct. (Specialized Knowledge/Applied Learning)</p>	X		X	X
<p>Outcome #3</p> <p>Apply learned standard of care skills and procedures to ensure the proper care and dosage of medications  (Quantitative Fluency)</p>		X	X	X
<p>Outcome# 4</p> <p>Communicate courteously and effectively with Dispatch personnel, other health care professionals, patients and with the public.  (Communication Fluency)</p>	X	X	X	X
<p>Outcome #5</p> <p>Demonstrate error recognition and the ability to correctly interpret patient signs and symptoms, and establish a course of action to solve problems and improve patient outcome. (Critical Thinking)</p>			X	X

Program Outcomes	Beginning (B), Developing (D) Advanced (A)	Assessment Method(s)	Responsibility	Results of Assessment	Actions Taken
<p>Outcome #1</p> <p>Demonstrate the theoretical knowledge and practical skills in the performance of patient assessment and develop a proper treatment plan. (Specialized Knowledge/Applied Learning)</p>	<p>EMTS 115, EMTS 101</p> <p>EMTS 102, EMTS 103</p>	<p>What: Theoretical knowledge- Practical skills</p> <p>How: Pass written evaluation and practical skills evaluation</p> <p>Benchmark: Pass with 80% on written exam on first attempt.</p>	<p>Who: Instructor</p> <p>When: 3<sup>rd</sup> week of class</p> <p>6<sup>th</sup> week of class</p> <p>9<sup>th</sup> week of class</p> <p>12<sup>th</sup> week of class</p>	<p>Results: 80% or above on written tests.</p> <p>Must pass off all skills evaluations with 80%</p> <p>Key Findings: Proficiency</p> <p>Conclusions: Adding weekly crew meetings helped</p>	<p>Action:</p> <p>Group meetings with instructor</p> <p>Re-evaluation Date:</p> <p>During scenarios in class</p> <p>Lab</p>

<p>Outcome #2</p> <p>Demonstrate skills practice according to NREMT standards in safety, professional behavior and ethical conduct. (Specialized Knowledge/ Applied Learning)</p>	<p>EMTS 115, EMTS 101</p> <p>EMTS 102, EMTS 103</p>	<p>What: Practical Skills evaluation</p> <p>How: Pass practical skills evaluations</p> <p>Benchmark: Must pass with 85% on second attempt</p>	<p>Who: Lab Instructor and Course Instructor</p> <p>When: Lab</p>	<p>Results: More students passing Skills exams first attempt</p> <p>Key Findings: Students needed more one on one</p> <p>Conclusions: Weekly labs are very important to outcomes</p>	<p>Action: Added more proctors at lab</p> <p>Re-evaluation Date: Lab Skills evaluations</p>
<p>Outcome #3</p> <p>Apply learned standard of care skills and procedures to ensure the proper care and dosage of medications (Quantitative Fluency)</p>	<p>EMTS 115, EMTS 101</p> <p>EMTS 102, EMTS 103</p>	<p>What: Demonstrate learned knowledge of standard of care of medications</p> <p>How: Pass skill evaluation</p> <p>Benchmark: 100% second attempt</p>	<p>Who: Instructor/ lab instructor</p> <p>When: During 102 and lab</p>	<p>Results: Higher test scores on pharmacology</p> <p>Key Findings: Better understanding of medications; doses, indications for and affects</p> <p>Conclusions: Students need more hands on with the pharmacology during</p>	<p>Action: Added more practical application of medications into scenarios</p> <p>Re-evaluation Date: Next class , Lab</p>

<p>Outcome #4</p> <p>Communicate courteously and effectively with Dispatch personnel, other health care professionals, patients and with the public.</p> <p>(Communication Fluency)</p>	<p>EMTS 115, EMTS 101</p> <p>EMTS 102, EMTS 103</p>	<p>What:</p> <p>Demonstrate proper communications skills with dispatch, ER personnel and public</p> <p>How: Complete 4 hour shift at 911, Properly execute a radio report to an Emergency room</p> <p>Benchmark: 95% Efficiency</p>	<p>Who:</p> <p>Instructors and 911 dispatchers</p> <p>When: Week 8</p>	<p>Results:</p> <p>Students were able to practice communication skills between dispatchers and hospital personnel. Showed improvement on competencies in radio communication and hand off reports.</p> <p>Key Findings:</p> <p>Students need to practice radio communications as well as face-to-face</p> <p>Conclusions:</p> <p>Professional radio communication is needed for student</p>	<p>Action:</p> <p>Introduced radio communication</p> <p>Re-evaluation Date:</p> <p>Every class scenario</p> <p>Lab on Friday afternoons</p>
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<p>Outcome #5</p> <p>Demonstrate error recognition and the ability to correctly interpret patient signs and symptoms, and establish a course of action to solve problems and improve patient outcome. (Critical Thinking)</p>	<p>EMTS 115, EMTS 101</p> <p>EMTS 102, EMTS 103</p>	<p>What: Demonstrate how to run a problem-based scenario with proper assessment and prepare a treatment plan.</p> <p>How: Scenario</p> <p>Benchmark: 95% Accuracy</p>	<p>Who: Instructor</p> <p>When: By the end of class and during scenarios</p>	<p>Results: Improved performance</p> <p>Key Findings: Students were improving in their performance after evaluating others</p> <p>Conclusions: Accurately assessing others helps them to improve their own skills and develop a treatment plan</p>	<p>Action: Added evaluation forms for scenarios</p> <p>Re-evaluation Date: Classroom scenario days</p> <p>End of course</p> <p>We will implement this into Jan 2016 semester</p>
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## 6. Future Program Plans.

The student learning outcomes have shown that the program's teaching- learning environment fosters a positive learning experience. CMU has an 86% pass rate on the National Registry exam. Although this is a good rate, the faculty has set a goal to improve this rate to 92% by the end of 2016. After review of our student learning outcomes and student evaluations, we have added more hands -on time and practical application of the lecture material. The EMT-B program has asked that each class elect class officers that can collect student opinions and assess student needs for future improvement. Class officers meet with the instructors weekly to relay their information to the instructors.

To enhance the learning experience for all Emergency Courses at CMU, we are initiating a network between all three courses that will allow the responder level students to work alongside the more advanced EMT's and Paramedics. This unification of differing levels will better prepare the students for their transition to street ready healthcare providers.

We have identified our strengths to be many years of experience, quality teaching experience and a very enthusiastic faculty that wants to enhance student learning and produce street ready EMT'S. Another strength is the network of support from the community healthcare providers to our staff. Many have worked for or are now actively working for an agency providing emergency care to the sick and injured. Having faculty that are still actively involved in the profession that students are seeking brings greater awareness for detail and contacts for future employment to the student.

Some of the challenges we are facing are:

1. Classroom availability and size of rooms. With the numbers of students wanting in the programs class size is becoming constraining for the instructor to be able to bring in all the equipment they need to add the kinesthetic learning to the lecture. They are being creative in their methods and integrating the practical application to fit into lab time or at the end of class instead of during the lecture.
2. Instructors- with the increase in numbers of students wanting to take the courses, it is becoming necessary for more instructors to be added to the faculty. The Program Director needs to be able to focus on administrative duties and tasks and not be as involved in the teaching aspect. With the increase in student numbers lab personnel is also becoming more needed in order to maintain the integrity of the practical and skills portion of the curriculum.

Future trends in the EMS industry will help the CMU program and also help generate income to the Colorado Mesa University. Many departments are increasing the numbers of EMT's being put out on the ambulances and with the expansion of one of the area hospitals, more job opportunities will become available. St Mary's Hospital has notified the EMT program that they will be enhancing their Cardiac floor to include more EKG technicians during 2016. They have asked for EMT students to send candidates who would like training in this area.

Marketing the program would be a key factor in its continual growth and development. As we are planning to add the Paramedic Program to the Health Sciences department, we will need to reach out to area agencies and gain a strong relationship of collaboration so that we will know their needs and be able to provide those needs in a professional manner.

Part of the reason for the closure of the Paramedic program in 2014 was the demand for the program was limited. As stated before, interest in the program is present, but commitment to enroll in the program as observed at 5 or less students per cohort. The expense of the program did not outweigh the cost of graduating 25 students in 6 programs. Discussion occurred in 2014 and 2015 with local fire chiefs and their commitment to send students to CMU paramedic program remained at 2-3 students per year. The challenge will be as the program is brought back in 2016 to have enrollment at the level to support the financial obligations. The second challenge will be to assure critical experiences are available for students to receive adequate training.



# Appendix A

## EMT Policy & Procedure Guide



## POLICY

TITLE: EVALUATIONS

LAST REVIEW DATE: August 1, 2006

## STANDARD

Both written and practice evaluations are used to assess the student's understanding of didactic information and psycho motor skills.

## PROCEDURE

### Written evaluations

Examinations will be administered to evaluate student achievement. Multiple examinations will be given and will include information contained in the block of information covered prior to the examination. The final examination will cover all material contained in the program.

### Quizzes

Quizzes may be administered at the start of or during any class and will contain information from the previous class or from reading assignments.

### Retesting written evaluations

The student is permitted to retake one (1) written examination if the score is less than 80%. (If the student achieves less than 80% on module one (1) the retake MUST be used for module one). Retakes must be completed within one week and scheduled in advance with the Course Director. Only one (1) retake will be allowed. The student must achieve a score of 90% on the retest. Any student not completing the retest with a score of 90% will be dismissed from the course, without prejudice. The student will be eligible for the next scheduled EMT-Basic course.

### Practical evaluations

Practical exams including skills check-off will occur at various times to document skill proficiency.

### Retesting practical evaluations

The student must repeat practical exams/skills check-off until proficiency is achieved. Repeat exams will normally be done in subsequent classes. Any student who after remediation cannot demonstrate required skill proficiency will not be eligible for course completion.

### Test Review

Test will be reviewed after all evaluations are graded by the Course Director. Students may review test by appointment with the Course Director.

## POLICY

TITLE: COURSE RECORDS

LAST REVIEW DATE: August 1, 2006

## STANDARD

Course files and records are confidential and not subject to review by any person outside of the instructor, staff, hospital administration, student and representatives of the State Health Department's EMS Division

## PROCEDURE

- Student files contain original application, examinations, quizzes, skills check-off sheets, and any other materials provided by the student. The file will also contain documentation relating to remediation or other issues addressed by the Course Director.
- Students may review their student files by contacting the Course Director.
- Upon completion of the course, student files will be maintained in accordance with the State EMS Division requirements.

## POLICY

TITLE: ATTENDANCE

LAST REVIEW DATE: August 1, 2006

## STANDARD

There will be a large amount of reading and studying outside of the classroom. Participation will be required as there is also a significant amount of skills and scenario practice. Since there is a large amount of information covered during class, any student missing greater than 10% of class will be dismissed from the course.

## PROCEDURE

Make up work is the responsibility of the student. The student can review materials with one of the instructors by making an appointment through the Program Coordinator.

## POLICY

TITLE: COURSE COMPLETION

LAST REVIEW DATE: August 1, 2006

## STANDARD

To successfully complete the EMT-Basic course, the student must demonstrate proficiency.

## PROCEDURE

The following is a proficiency list:

Didactic: Academic requirement for completion is an 80% grade average.

Skills: Demonstrate proficiency in all required skills and documented by sign-off sheets.

Clinicals: Demonstrate completion of clinical rotations by documented sign-off sheets.

Conduct: Unprofessional conduct may result in immediate dismissal from the course for violations such as but not limited to:

- ✓ Patient confidentiality
- ✓ Cheating on examinations
- ✓ Misrepresentation
- ✓ Unsafe acts or disruptive conduct in clinical rotations/class
- ✓ Neglect or abuse of equipment/facilities or classmates

## POLICY

TITLE: CLINICAL ROTATIONS

LAST REVIEW DATE: August 1, 2006

## STANDARD

All clinical hours must be completed prior to final practical testing; failure to do so will result in an incomplete or failing grade for the course

## PROCEDURE

### Emergency Department

Ten (10) hours of clinical rotation in an approved emergency department.

Documentation of clinical time will be required (see course information packet).

### Third Rider

Eight (8) patient contacts with an approved fire department, private ambulance or both.

Field patient contact will require a trip report (see course information packet).

### Additional Documentation

Prior to scheduling clinical rotations a student must provide documentation of the following:

- ✓ HBV immunization or proof of declination of HBV immunization
- ✓ Current professional liability insurance with \$1,000,000/\$3,000,000 limits
- ✓ Proof of worker's compensation insurance or proof of personal health insurance
- ✓ Signed "Memorandum of Understanding"
- ✓ Background check completed by St. Mary's Hospital

## POLICY

TITLE: DRESS CODE

LAST REVIEW DATE: August 1, 2006

## STANDARD

It is important to present a professional appearance in the classroom as well as during clinical rotations, third rider time, and practical evaluations. Therefore the following standards apply.

## PROCEDURE

The following will not be permitted in class, clinical rotations or during practical evaluations:

- ✓ Low cut shirts/blouses
- ✓ Torn or ripped clothing
- ✓ Hats
- ✓ Shirts with inappropriate statements
- ✓ Short-shorts
- ✓ Flip-flops/sandals

In order to provide the best educational experience without interruptions to all students, the following will not be permitted during class, clinical rotations or practical evaluations:

- ✓ Pagers
- ✓ Radios
- ✓ Cell phones

STUDENT ACKNOWLEDGEMENT FORM

St. Mary's Hospital complies with all state and federal laws, rules, regulations, etc. concerning non-discrimination in regard to recruiting, selection, and treatment of students and staff.

By signing below I attest that I have read and understand the Functional Position Description, Disability Accommodation Policy, Memorandum of Understanding and EMT-Basic Policy and Procedure Guide.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Student Name (print clearly)

EMT-Basic Course: February 6, 2007 thru June 29, 2007



Colorado Department of  
Public Health and Environment  
**Emergency Medical Services Division**

POLICY # 94-06      Date: 12/01/94      Ref: Disability Accommodation Policy

Policy Statement (supersedes/updates: none)

### Disability Accommodation Policy

The EMS Division will offer reasonable and appropriate accommodations for the written component of the certification examination for those persons with documented disabilities. The following information addresses prospective student's information, requesting an accommodation, establishing eligibility for an accommodation, the EMS rules and record keeping.

#### A. Prospective Student Information

The EMS Division requires that a course coordinator review the functional job description with every prospective student prior to his/her entering into the education program. The coordinator should understand all policy statements from the EMS Division concerning students and the Americans with Disabilities Act. Prospective students need to understand the competencies and tasks that are required within the profession before entering a training program.

Students who have received an accommodation during the course need to fully understand that there is a separate process for requesting an accommodation for the state written certification exam. And further, the EMS Division will establish eligibility for an accommodation on a case by case basis. In other words, just because a student was allowed an accommodation during the course does not guarantee an accommodation for the state written certification exam. Documentation confirming and describing the disability must be submitted for consideration according to policy.

#### B. Requesting an Accommodation

Request for accommodation forms and certification application forms are available from the EMS Division. Either form may be requested by training center personnel or by the candidate. The candidate who is requesting an accommodation must complete the

request for disability accommodation form. In addition, a statement on letterhead stationary from a professional must be attached. This statement must confirm and describe the disability for which the accommodation is required.

Applicants with disabilities are entitled to, and have the responsibility to meet the same deadlines for application and submission of documentation established for pre-registration of non-disabled individuals. The process involved in establishing eligibility will not impose discriminatory timelines for application on the individual with a disability.

#### C. Establishing Eligibility for an Accommodation

The EMS Division will offer reasonable accommodations for the written certification exam for those persons with documented disabilities.

Based upon an analysis of the functional job description and the written examination, it has been determined that persons with learning disabilities manifested in the academic areas of reading decoding or reading comprehension may be eligible for special test accommodations. An accommodation which may be allowed on written examination due to documented learning disabilities relating to reading decoding or reading comprehension, is extended time for completing the written examination given in the standard format. The standard extension that may be allowed is time and a half.

Documentation of a specific disability which would negatively impact one's performance on the written examination must include a completed request for disability accommodation form with signatures of the individual and the professional familiar with the disability, and a statement on letterhead stationary from the professional who is familiar with the individual's disability. This statement must confirm and describe the disability for which an accommodation is being requested.

The professional could be a physician, psychologist, rehabilitation counselor, or a disability service provider from the college if there was an accommodation in that most recent academic setting.

Requests for accommodations on the written examination will be reviewed on a case by case basis. If the appropriateness of the requested accommodation is in doubt, the EMS Division will discuss options with the candidate and will consult with professionals knowledgeable about disability and functions of the profession. The recency of disability testing is not an issue in determining the need for accommodation. A permanent learning disability is a permanent disability.

#### D. Section 5.2

Section 5.2 of the Rules Pertaining to Emergency Medical Services defines the rules for initial EMT-Basic, EMT-Intermediate and EMT-Paramedic certification. Provisions

within EMS rules require a candidate to pass skills examinations as well as achieve a passing grade on the written certification examination.

The word “written” was purposefully included by EMS Division to insure that certified individuals could read. The written portion of the EMT certification examination is designed, in part, to measure an examinee’s ability to read and understand English. Being able to read is a skill that is justified as integral to the performance of the job.

E. Record Keeping

Diagnostic information related to an individual’s disability is highly confidential and will not be disclosed to third parties. The accommodation file will be maintained separately from the application and test result files.



Colorado Department of Public and Environment  
Emergency Medical Services Division

**REQUEST FOR DISABILITY ACCOMMODATION**

If you have a disability requiring appropriate accommodations in taking the state written certification examination as an Emergency Medical Technician, be sure to complete and submit this form along with your application. In addition, please attach a statement from a professional who is familiar with your disability on letterhead stationery. This statement must confirm and describe the disability for which you require accommodation. This information will not be filed with your application or test results and will be confidential.

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1. Do you have any disability-related needs that we should be made aware of in order to provide reasonable accommodations for the examination? If the answer is yes, please specify.

Disability \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Have you had testing accommodations in your recent academic setting? If you answer “yes” specify the type of accommodation. Have a professional familiar with your disability complete this information, if needed.

Disability

Type of test accommodation

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Please sign and date the bottom of this form. Make sure the professional who helps you complete the form and the attached statement also signs and dates this form.

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Signature of Applicant

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Date

---

Printed Name of Applicant

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Signature of Professional

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Date

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Printed Name of Professional



Colorado Department of  
Public Health and Environment  
**Emergency Medical Services Division**

POLICY # 94-07      Date: 12/01/94      Ref: Functional Position Description - EMT

Policy Statement (supersedes/updates: none)

Functional Position Description Emergency Medical Technician

Introduction

We are providing the following general position description of Emergency Medical Technician EMT-Basic (EMT-B), EMT-Intermediate (EMT-I) and EMT-Paramedic (EMT-P). This should guide you when giving advice to anyone who is interested in understanding what qualifications, competencies and tasks are expected of the EMT-B, EMT-I or EMT-P. It is the ultimate responsibility of the employer to define specific job descriptions within each EMS entity.

Qualifications

Successfully complete an EMS Division approved course. Achievement of a passing score on written and practical certification examinations.

Must be at least 18 years of age. Generally, the knowledge and skills required show the need for a high school education or equivalent. Ability to communicate verbally; via telephone and radio equipment; ability to lift, carry and balance up to 125 pounds (250 with assistance); ability to interpret written oral and diagnostic form instructions; ability to use good judgment and remain calm in high-stress situations; ability to work effectively in an environment with loud noises and flashing lights; ability to function efficiently throughout an entire work shift; ability to calculate weight and volume ratios and read small print, both under threatening time constraints; ability to read and understand English language manuals and road maps; accurately discern street signs and address numbers; ability to interview patient, family members, and bystanders: ability to document, in writing, all relevant information in prescribed format in light of legal ramifications of such; ability to converse in English with coworkers and hospital staff as to status of patient. Good manual dexterity, with ability to perform all tasks related to highest quality patient care.

Ability to bend, stoop, and crawl on uneven terrain; and the ability to withstand varied environmental conditions such as extreme heat, cold, and moisture. Ability to work in low light, confined spaces and other dangerous environments.

## Competency Areas

### EMT-Basic

Must demonstrate competency handling emergencies; utilize all Basic Life Support equipment and skills in accordance with all behavioral objectives in the DOT/EMT Basic curriculum. Automated external defibrillation and intravenous access are optional skills and curriculum.

### EMT-Intermediate

Must demonstrate competency handling emergencies; utilize all Basic and Advanced Life Support equipment and skills in accordance with all behavioral objectives in the Colorado Intermediate curriculum.

### EMT-Paramedic

Must demonstrate competency handling emergencies; utilize all Basic and Advanced Life Support equipment and skills in accordance with all behavioral objectives in the DOT/EMT Paramedic curriculum. The EMT-P has reached the highest level of certification.

## Description of Tasks

Receives call from dispatcher, responds verbally to emergency calls, reads maps, may drive ambulance to emergency site, uses most expeditious route, and observes traffic ordinance and regulations.

Determines nature and extent of illness or injury, takes pulse, blood pressure, visually observes changes in skin color, auscultates breath sounds, makes determination regarding patient status, establishes priority for emergency care, renders appropriate emergency care (based on competency level); may administer intravenous drugs or fluid replacement as directed by physician. May use equipment (based on competency level) such as but not limited to, defibrillator, electrocardiograph, performs endotracheal intubation to open airways and ventilate patient, inflates pneumatic anti-shock garment to improve patient's blood circulation.

Assists in lifting, carrying, and transporting patient to ambulance and on to a medical facility. Reassures patients and bystanders, avoids mishandling patient and undue haste, and searches for medical identification emblem to aid in care. Extricates patient from entrapment, assesses extent of injury, uses prescribed techniques and appliances, radios dispatcher for additional assistance or services, provides light rescue service if required, provides additional emergency care following established protocols.

Complies with regulations in handling deceased, notifies authorities, arrange for protection of property and evidence at scene. Determines appropriate facility to which patient will be transported, reports nature and extent of injuries or illness to the facility, asks for direction from hospital physician or emergency facility. Assists in removing patient from ambulance and into emergency facility. Reports verbally and in writing observations about and care of patient at the scene and in-route to facility, provides assistance to emergency staff as required. Replaces supplies, sends used supplies for sterilization, checks all equipment for future readiness, maintains, ambulance in operable condition, ensures ambulance cleanliness and orderliness of equipment and supplies, decontaminates vehicle interior, determines vehicle readiness by checking oil, gas, water in battery and radiator, and tire pressure, maintains familiarity with all specialized equipment.

# Appendix B

## EMT Faculty Vitae



**A. Daniel Barela**

690 VEINTE DRIVE • DELTA • COLORADO • 81416  
970 • 874 • 8413  
dbarela@mesastate.edu

## **WORK EXPERIENCE**

### **MESA STATE COLLEGE 8/15/2007 TO PRESENT**

**EMS Program Director** - Supervise delivery of Emergency Medical Technician and Paramedic Curriculum, Coordinate clinical rotations and contracts with affiliated institutions. Recruit, coordinate and develop faculty in concert with Program Medical Director and Health Science Department Director. Coordinate continuous quality improvement of the program.

- ☒ Became national certified EMS Educator, September 14, 2007

### **ASSOCIATED GOVERNMENTS OF NORTHWEST COLORADO 6/1/2002 TO 8/1/2007**

**Northwest RETAC Coordinator** - Facilitate, inform and advise the Northwest Colorado Region EMS and Trauma Advisory Council (RETAC) in activities and planning. Assure compliance with Colorado's Department of Public Health and Environment requirements for RETACs. Promote harmonious relations between local governments and integrated emergency and health service providers in Northwestern Colorado.

- ☒ Awarded four regional multi-agency grants.
- ☒ Conducted 5 county needs assessment to develop two regional system development plans
- ☒ Conducted 2 regional Leadership Conferences
- ☒ Supervised regional communications system upgrade on UHF and VHF
- ☒ Created NWRETAC.ORG webpage

### **DELTA COUNTY MEMORIAL HOSPITAL 2/1/88 TO 2/1/00**

**Ambulance District Manager** - Administered and coordinated operations of the ambulance service for Delta, Cedaredge and Western Delta County, CO. Approximately 1900 responses annually; Supervised eleven full time and fifteen part-time employees.

- ☒ Developed and fostered a shared management work team
- ☒ Restructured the EMS system under hospital management
- ☒ Developed the Delta County E.M.S. Council (1991)
- ☒ Developed an integrated multi-agency county-wide cardiac care system (includes Emergency Medical Dispatch, EMT-Defibrillation, Paramedic intercepts)
- ☒ Awarded five multi-agency grants
- ☒ Coordinated installation/establishment of UHF communication system
- ☒ Awarded four emergency vehicle grants
- ☒ Served on Delta Hospital's Quality Council 5 years and Strategic Planning Task Force
- ☒ Served on Ambulance District Plan Task Force responsible for creation of Special Tax District for E.M.S.

**Training Received:** Interaction Management, Team Facilitator, Continuous Quality Improvement, and Increasing Human Effectiveness

### **MID-CONTINENT RESOURCES 12/80 TO 1/88**

**E.M.S. Coordinator** - Planned for and responded to medical emergencies at coal mining operations, both at surface facilities and within any of four underground mines. Taught CPR, First Aid, First Responder, EMT-B,

and Mine Rescue Team Classes. Supervised 3-5 Security-EMTs. Performed various administrative duties for the Safety Department and the Operations VP.

- ☒ Coordinated response to 1981 Mine disaster (mine explosion)
- ☒ Developed new EMS education strategies
- ☒ Original faculty of Colorado's Acute Care for Trauma Course
- ☒ Published author of R.A.C.E. system of patient assessment

**Training Received:** Basic Supervision, Time Management, Accountability Checkpoint Management, EMS I/C Course, PHTLS, Montana C.T.C., Mastery Teaching

### **ST. MARY'S CARE FLIGHT**

**5/90 TO PRESENT**

**Flight Paramedic** - Part time position on a RN/Paramedic flight team, taking call 5-7 days a month for both helicopter and fixed wing operations, performing all manner of critical care assistance on scene flights and inter-facility transports; Other duties commensurate with maintaining emergency readiness. Received training in flight physiology, Critical Care transport and advanced airway management. TNATC - Trauma Nurse Air Transport Course

### **DELTA MONTROSE VO-TECH CENTER 3/88 TO PRESENT (PART TIME)**

**EMS Program Instructor** - Instructed and coordinated EMT-B, EMT-I, EMT-P Courses and EMS CE classes including ACLS, BTLs, PALS, AMLS, ACT, and ACT II

### **COLORADO MOUNTAIN COLLEGE**

**1/77 TO 12/87**

**EMS I/C** - Taught and coordinated First Aid, CPR, EMT-Basic, ACT and ACT-Instructor courses, assisted with EMT-I classes

### **EDUCATIONAL EXPERIENCE**

High school graduate- Burgess High School, El Paso, Texas

**Associate of Arts-** Liberal Arts Math/Science Emphasis- Colorado Mountain College, Glenwood Springs Colorado  
Additional College courses completed in statistics, biology, human anatomy, computer science, and outdoors studies

**Currently pursuing:** Bachelor of Applied Science - Public Safety Administration - Mesa State College

**Certifications:** EMT-P, ACLS Instructor, BCLS Instructor, PALS Instructor, AMLS Instructor, TBI Instructor, ACT Author and BTLs Instructor, National Certified EMS Educator

### **SERVICE EXPERIENCE**

**EMS Association of Colorado (EMSAC)** Board of Directors, Region 10 Representative 4/2010 - Present; **Colorado Rural Health Center**, Board of Directors January 2004 - July 2010; **Colorado EMS and Trauma Advisory Council (SEMTAC)** July 2002 - July 2006; Chairman of Resource Committee, Grant Waiver Committee and EMS Education Subcommittee. Served on MCI committee, Public Policy and Pre-Hospital care Committee including four subcommittees, Ground Ambulance License subcommittee, Critical Care Transport & Triage algorithm task force; Participated on the State's EMTS System Development Planning Process. Previously on: Delta-Montrose Technical College EMS Advisory Board (13yrs); Delta County EMS council chairman (10 yrs.) State EMS Plan Task Force (1992)

# CURRICULUM VITAE

**Fidel O. Garcia, EMT-Paramedic**  
President, Professional EMS Education, LLC

Address: 629 Hudson Bay Drive  
Grand Junction, CO 81504

Phone: Office: 970- 254-8135  
Mobile: 970-210-0466  
Facsimile: 970-242-8357

Email: [fidel@professionalemseducation.com](mailto:fidel@professionalemseducation.com)

## **Present and Past Positions**

President, Professional EMS Education, LLC, May 2006 to Present

Primary EMS Instructor, Mesa State College EMT-Paramedic - EMT-Basic Program,  
8-06 to Present

Adjunct Faculty for Colorado Mountain College Paramedic Program, Edwards Colorado, January  
05 to Present

Paramedic / Education Coordinator, Delta County Ambulance District, 5-00 to Present

Continuing Education I / C, Community Hospital, Grand Junction, CO 1996 – Present

Paramedic, Clifton Fire Protection District, 6-09 to Present

Paramedic Powderhorn Ski Area, Grand Junction, CO 2000 – 2006

Interim EMS Program Director, Mesa State College, 9-06 to 8-07

EMT-Paramedic – Lower Valley Fire Protection District, 8-02 to 1-07

EMS Education Coordinator, St. Mary's Hospital, Grand Junction, CO 1997 – August 2006  
On site skills coordinator / clinical coordinator Beth-El Paramedic program, 2000 – 2001

St. Mary's Air Life Paramedic, Grand Junction, CO. 1991 – 1999

Paramedic / Continuing Education Coordinator, Premier Services Ambulance / Medtrans /AMR  
of Grand Junction, Grand Junction Co 1992 – 1997

EMS Program Director, I/C, Delta Montrose Vo-Tech School, Delta, CO 1989 – 1992

EMT-I, Delta Ambulance Service, Delta, CO 1986-1991

Deputy Coroner, Lake County, Leadville, CO 1984 – 1986

EMT-B, Silver King Ambulance Team, St. Vincent's General Hospital, Leadville, CO 1980 –  
1986

## **Professional Medical Education**

Full Time Vocational Credential, Mesa State College, January 2009

DDI "Hiring For Success" Trainer Certification, Pittsburgh, PA June 2006

NAEMSE Conference, San Antonio, NAEMSE Instructor Course: Train The Trainer 2005

NAEMT EMS Exposition, Nashville TN - AMLS Provider / Instructor Course 2002

CSEC Conf. Durango CO - PEPP Provider / Instructor / Coordinator Course 2002

NAEMSE Conf. Phoenix AZ - Medtronics 12 Lead Instructor/Coordinator Course, 2000

Colorado Mountain College, Critical Incident Stress Management Training 1995

Colorado Northwestern Community College, Rangely, CO 1999

St. Mary's Hospital, Grand Junction, CO - BTLs Instructor / Coordinator Course, 1992

Colorado State University, Fort Collins, CO – Vocational Education Credential 1991-92

St. Mary's Hospital, Grand Junction, CO - EMT-P Certification 1991

Delta Vo - Tech School, Delta, CO - Advanced Burn Life Support Course 1991

Colorado Mtn College, Glenwood Springs, CO - CO EMS Inst/Coordinator Course 1990

St. Mary's Hospital, Grand Junction, CO PALS Instructor / Coordinator Course, 1990

Mesa State College, Grand Junction, CO – General Education 1989-90

St. Mary's Hospital, Grand Junction, CO - ACLS Instructor / Coordinator Course, 1989

St. Vincent's General Hospital, Leadville, CO - EMT-I Certification, 1986

Aims Community College, Fort Collins, CO. EMT Instructor / Coordinator Course, 1985

Colorado Mountain College, Vail, CO - CPR I / C Course, 1982

Colorado Mountain College, Leadville, CO. EMT-B Certification, 1980

Colorado Mountain College, Leadville, CO – General Ed 1979 – 1982

Lake County High School, Leadville, CO – High School Diploma 1976 – 1979

**PAMELA K. HOLDER**

231 N. Pine Street  
Fruita, CO 81521  
970-858-9745  
569-96-4589

Objective: EMT -B course teaching/ assistant teaching position .

**HIGHLIGHTS OF QUALIFICATIONS**

- \* State Certified Primary and Assistant Instructor
- \* 2 years Community Hospital Emergency Room.
- \* 7 years experience in St. Mary's Hospital Emergency Room.
- \* 6 years in SMH Fast Track program under Jim Harkreader FNP
- \* Advanced Cardiac Life Support and IV class Instructor certified.
- \* Currently serving on Mesa County EMS Council since 2004.
- \* Helped writing Mesa County Protocol Manual
- \* 17 years on a volunteer agency within Lower Valley Fire District as an EMT-I./ classroom instructor for EMS/Fire training.
- \* 3 years teaching experience with Professional EMS Education Services-Fidel Garcia
- \* Experience with both volunteer and paid fire agencies.
- \* 6 years experience with private ambulance service.
- \* Reputation for fair and ethical relationships with students, staff and patients.
- \* 10 years experience as City of Fruita Pool Manager
- \* Experience in team building and management; thorough understanding of how various departments interrelate.
- \* Organize, plan and IC Medical coverage for Country Jam USA since 1998.
- \* Excellent patient care skills.

**RELEVANT SKILLS & EXPERIENCE**

**MANAGEMENT**

- . City of Fruita Pool Manager for 10 years. Supervisory over 15- 20 employees. Hiring, firing, job evaluations, financial planning, customer relationships, and disciplinary actions.
- . Coordinated and planned a Fire and Medical action plan for Country Jam USA for 10 years. This includes a Medical Tent with medical teams from all of the area agencies working together.
- . President of a Women's Church Group overseeing the activities of 188 women. This includes financial planning, activities, service projects, etc.
- . Team leader for ACLS coverage for Lower Valley Fire Department for 10 years.
- . Business owner in the City of Fruita

**TEAM PLAYER**

- . Active participant in organizing and developing a Protocol handbook for Mesa County EMS with Dr Duke.
- . Volunteer Firefighter/ EMT- I for Lower Valley for 17 years.
- . Teach and Proctor EMT classes and certification courses for St Mary's Hospital and Mesa County.
- . Member of the Mesa County EMS Council
- . State and National Registry Proctor for EMT's
- . Work well with all types of individuals.

#### EMPLOYMENT HISTORY

1972-1974	Ward Clerk	Mercy Hospital, Tallahassee, Florida
1976-1979	Employment Specialist	US Navy, Taipei, Taiwan
1979-1982	Dental Assistant	Dr Nagel, Grand Junction, CO
1985-1995	Pool Manager/ Rec Director	City of Fruita
1996-2001	ER Technician	St Mary's Hospital /Community Hospital
2001-2006	Business Owner	Fruita Health & Fitness Center
1991-present		Lower Valley Fire Dept- Volunteer EMT-I/ Firefighter

#### EDUCATION

Escambia High School, Pensacola, Florida  
Florida State University, Tallahassee, Florida  
University of Maryland, Overseas Branch in Taipei, Taiwan  
Los Angeles Community College Overseas Branch, Taipei, Taiwan  
St. Mary's Hospital, Grand Junction, CO -all EMS Training

# Travis W. Holder

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**Objective** Position as Proctor/ Instructor at Mesa State College

**Experience** 1994- present Lower Valley Fire District Fruita, Colorado

- Fire Prevention Instructor in District 51
- Instructor for Fire and EMT classes
- Firefighter / EMT/ Crew Boss
- Firefighter II
- Fire Inspections for commercial and residential buildings
- HAZ-MAT Operation level certification
- HAZ-MAT Awareness level certification
- Incident Command certifications; I-100, I-200, I-300
- Wildland Fire certifications ; S- 130, S-190, S-131, I-210, S-212,S-215
- Wildland Red Card
- NIMMS 700
- Crew Leader for Fire and Emergency scenes
- Command experience
- Fire Prevention Specialist
- Kept accurate training records for all firefighters
- Microsoft Word and Excel

1999-2003 Mike Brady Construction Fruita, Colorado

**Ranch Manager**

- Managed all grounds work for the ranch
- Took care of livestock.
- Maintained ranch equipment

3/2003- 7/2003 Woodscape of Palisade Palisade, Colorado

**Job Foreman**

- Maintained all jobsite equipment
- General supervision of workers

2003- 2005 Sam's Club Grand Junction, CO

**Night Merchandiser**

- Stocked merchandise
- Prepared floor displays for the next day

**Education**

2000

- Fruita Monument High School graduate
- Study focus was on machines and mechanics 3.6 GPA

2000-2002 Western Colorado Community College - Grand Junction, CO

- Mechanics
- Outstanding Performance Award- ALTRUSA Award

2010 Wildland Firefighting Academy / Incident Management

2005- present

Fire Training

- Helped develop an effective EMT service for Mass Events
- Crew Boss
- Truck drafting and shuttle
- Emergency driving training course
- Brush fire equipment management
- Ropes and Knots
- Fire Behavior
- Ventilation
- Ladders

**Interests**

Personal Trainer, Weight lifting, fishing, hunting, gardening, carpentry, firefighting.

- Developed an excellent fire safety program for all area Elementary Schools
- Instructor for Ice Rescue
- MicroSoft/ Xcel

**Special Skills**

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## Colorado Mesa University EMS Survey

### CoAEMSP Employer Summary Report

There are 4 CoAEMSP Employer Survey Records that match your Summary criteria.

5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree N/A = Not Applicable

**I. KNOWLEDGE BASE (Cognitive Domain)**

**THE GRADUATE:**

A. Has the EMS knowledge necessary to function in a healthcare setting.	Rating: 5 4 3 2 1 N/A Count: 2 2 Percentage: 50 50 Total Responses: 4 Mean ± SD: 4.5 ± 0.5
B. Has the general medical knowledge necessary to function in a healthcare setting.	Rating: 5 4 3 2 1 N/A Count: 2 2 Percentage: 50 50 Total Responses: 4 Mean ± SD: 4.5 ± 0.5
C. Is able to collect data from charts and patients.	Rating: 5 4 3 2 1 N/A Count: 2 2 Percentage: 50 50 Total Responses: 4 Mean ± SD: 4.0 ± 1.0
D. Is able to interpret patient data.	Rating: 5 4 3 2 1 N/A Count: 2 2 Percentage: 50 50 Total Responses: 4 Mean ± SD: 4.5 ± 0.5
E. Is able to recommend appropriate diagnostic and therapeutic procedures.	Rating: 5 4 3 2 1 N/A Count: 2 2 Percentage: 50 50 Total Responses: 4 Mean ± SD: 4.5 ± 0.5
F. Uses sound judgment while functioning in a healthcare setting.	Rating: 5 4 3 2 1 N/A Count: 2 2 Percentage: 50 50 Total Responses: 4 Mean ± SD: 4.5 ± 0.5

**Comments**

- Mulhausen, Ben - No Comment Entered
- GLASSMAN, TYLER - No Comment Entered
- REED, GWEN - No Comment Entered
- Brown, Stephanie - No Comment Entered

	Rating: 5 4 3 2 1 N/A
<b>Summary Statistics Knowledge Base (Cognitive Domain):</b>	Count: 12 10 2 0
	Percentage: 50 41 8
	Total Responses: 24 Mean ± SD: 4.4 ± 0.6

**II. CLINICAL PROFICIENCY (Psychomotor Domain)**

**THE GRADUATE:**



**Committee on Accreditation**  
of Educational Programs for the EMS Professions

8301 Lakeview Pkwy  
Suite #111-312  
Rowlett, TX 75088  
Main 214-703-8445  
Fax 214-703-8992  
www.coaemsp.org

April 1, 2013

Tim Foster, President  
Mesa State College  
1100 North Avenue  
Grand Junction, CO 81501

Dear President Foster:

Re: Program Number #600301

At a recent Board meeting, the Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP) considered the progress report submitted for the Paramedic Program sponsored by Mesa State College.

At that time, the Committee voted to acknowledge the progress report submitted, but is requesting an additional Progress Report further documenting the program's compliance with the **Standards**.

• **III. Resources**

**B. Personnel**

**1. Program Director**

**b. Qualifications**

The program director must: 1) possess a minimum of an Associate's degree for Emergency Medical Technician-Intermediate and a minimum of a Bachelor's degree for Emergency Medical Technician-Paramedic from a regionally accredited institution of higher education,

Rationale: The Program Director does not have a Bachelor's degree.

*Provide an official transcript (i.e. sent directly from the college Registrar's office to the CoAEMSP) documenting that the program director possesses a Bachelor's degree.*

*If the program director does not complete the degree by September 1, 2013: submit documentation of completing a minimum of 15 credits between January 1, 2013 and December 31, 2013 as documented by an official transcript submitted to CoAEMSP no later than March 1, 2014. [Only an official transcript is sufficient documentation.] In addition, a minimum of 15 credits must be earned each succeeding January 1 to December 31 period as documented by an official transcript submitted to CoAEMSP each March 1, until a baccalaureate degree is completed.*

The required Progress Report addressing the above citations must be sent in an electronic format (via email, CD, flash drive, or fileshare upload) to the Executive Office on or before **March 1, 2014** as a **single, complete pdf document using the attached progress report template**. Email submissions should be sent to Karen Franks at [karen@coaemsp.org](mailto:karen@coaemsp.org). Please note the new mailing address if you are submitting your report on a

A Committee on Accreditation of



February 18, 2014

Tim Foster  
President  
1100 North Avenue  
Grand Junction, CO 81501

Dear President Foster:

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) has received your letter requesting the voluntary withdrawal of the **Emergency Medical Technician-Paramedic program** at Colorado Mesa University in Grand Junction, Colorado.

As requested, your program will be considered **voluntarily withdrawn effective immediately**.

If your institution should wish to seek CAAHEP accreditation for the **Emergency Medical Technician- Paramedic program** in the future, your application would be welcome.

Sincerely,



Executive Director, JD, CAE.

Cc: Debra Bailey, PhD, RN, FNP, CDE, Director of Health Sciences  
Dr. Carol Futhy, Provost and Vice President of Academic Affairs  
Dr. Steve Werman, Assistant Vice President for Academic Affairs  
Douglas K. York, NREMT-P, PS, (NAEMT) CoA-EMSP Chair  
George W. Hatch, Jr., EdD, LP, EMT-P, CoA-EMSP Executive Director

# External Program Review

Prepared by:

Bill Spialek, BS, Paramedic

Chair/Faculty

Arapahoe Community College

May 6<sup>th</sup>, 2016

# COLORADO MESA UNIVERSITY EXTERNAL REVIEW REPORT

## EMERGENCY MEDICAL TECHNICIAN PROGRAM

MAY 6<sup>TH</sup>, 2016

### Narrative/Executive Summary

#### **A. Overview and brief history of the program based on the program's self-study**

The Emergency Medical Technician Program was transferred to Mesa State University from St. Mary's Hospital when the hospital reorganized their EMS Outreach program back in 2007. This is what paved the way for the University to recruit a program director and faculty to make Emergency Medical Service (EMS) education a regular offering of the Health Sciences Department (DHS). They have recently partnered with Western Colorado Community College (WCCC), which is a shared campus with CMU so that the EMT students can utilize the Health Services training building. Through CMU the EMT program is offered as a comprehensive one-semester, three-course program along with skills practice and clinical time in an emergency department or ambulance for a total of 195 contact hours. This meets the State requirements of a minimum of 44 contact hours. The Colorado Community College System (CCCS) has changed the way the EMT programs are being offered within the Community College System they still can remain as a one-semester program but they are broken down into sections EMS121 – Fundamentals 3CR, EMS122 – Medical CR4, EMS123 – Trauma 2CR, EMS124 – Ambulance Operations and Special Considerations 2CR, EMS170 – Clinical portion 1 CR for a total of 12 CR, which allows military veterans to apply for these courses and be viewed as full-time students.

Concern: As mentioned above the credits have changed to 12 total credits, whereas CMU is still only offering 10 credits and this falls short for military veterans wanting to enroll in order to be viewed as full-time students. Majority of all EMS Programs are being offered either through Colorado Community College Systems or Healthcare based organizations or Public or Private Ambulance Companies and Fire Departments. CMU one-semester EMT program is offered with three-courses that are similar to the CCCS sections but would need to be updated. See Recommendation 1.

Table 1. Executive Summary Template for External Reviewer's Observations

Program Review Element	Check the appropriate selection				Provide explanation if not agree with element and/or why unable to evaluate
	Agree	Not Agree	Unable to Evaluate	Not Applicable	
The program's self-study is a realistic and accurate appraisal of the program.	X				
The program's mission and its contributions are consistent with the institution's role and mission and its strategic goals.	X				
The program's goals are being met.	X				
The curriculum is appropriate to the breadth, depth, and level of the discipline.	X				
The curriculum is current, follows best practices, and/or adheres to the professional standards of the discipline.	X				
Student demand/enrollment is at an expected level in the context of the institution and program's role and mission.	X				
The program's teaching-learning environment fosters success of the program's students.	X				
Program faculty members are appropriately credentialed.		X			SEE REVIEW
Program faculty members actively contribute to scholarship, service and advising.	X				
Campus facilities meet the program's needs.		X			SEE REVIEW
Equipment meets the program's needs.	X				
Instructional technology meets the program's needs.	X				
Current library resources meet the program's needs.	X				
Student learning outcomes are appropriate to the discipline, clearly stated, measurable, and assessed.	X				SEE REVIEW/ VERY WELL DONE
Program faculty members are involved in on-going assessment efforts.	X				
Program faculty members analyze student learning outcome data and program effectiveness to foster continuous improvement.	X				
The program's articulation of its strengths and challenges is accurate/ appropriate and integral to its future planning.	X				

September 7, 2012

## **B. Program mission and goals and their relationship to the role and mission of CMU**

The EMS Mission Statement: We inspire, educate and empower caregivers and leaders of tomorrow's EMS system with lessons in character and in caring. We teach the knowledge, skills and behavior that define a competent entry-level EMS provider.

- 1). Instill confidence in students
- 2). Provide a positive learning environment
- 3). Promote patient ethics and patient advocacy

"It is the goal of the EMS education to instill an appreciation for the importance of life-long learning; to model what we teach; and to provide a safe and stimulating learning experience."

The program adheres to the following Goals and Standards:

"Graduate competent entry-level EMS providers"

1. Promote our values in all education activities
2. Prepare students to be leaders
3. Prepare students to be life-long learners
4. Teach to the most current standards of care
5. Promote evidence based medicine
6. Model what we teach
7. Teach in a safe and stimulating environment

The above mission and goals are consistent with the mission and role of CMU.

## **C. Curriculum review**

CMU Medical Services Program curriculum strictly follows the National Standards as set by the National Registry of Emergency Medical Technicians (NREMT). Students are required to meet the National EMS Education Standards, led by the National Association of EMS Educators. The EMT Program has developed a rigorous program using the most current national standards and best practices as outlined by Mesa County. The increasing emphasis on evidence-based medicine, requires faculty to select didactic and clinical assignments consistent with the needs of the patients and best care. The active hands-on skill labs along with the scenario events that run with the other EMS programs allows the students opportunities to learn about incorporating realism into practice. I found this to be one of best strengths of this program.

Concern: CMU has a Health Sciences Department at their campus and I could not find if there was any multi-discipline activities outside the EMS programs where the EMT

students did any type of scenario type training utilizing the other Health Sciences Program students. See Recommendation 2.

#### **D. Analysis of student demand/enrollment for the EMT Program**

The EMT program has been a thriving program for CMU since its inception back in 2007 and even though it has had changes in leadership their current Director Pam Holder has increased the EMT programs to 4 in 2015-2016 academic years. The EMT program developed a partnership with Kinesiology resulting in many athletic trainer seniors completing the EMT program as part of their degree. The overall growth of the program was 179% for the EMT.

The demand for EMT is seen in the rural area in paid positions as well as volunteer positions. Additional certification for many occupations has led to the demand of the EMT program, such as oil workers, coal miners, and outdoor employment are requesting their employees to be EMT certified.

Employment of EMTs is projected to “increase 24% from 2014 to 2024, much faster than the average for all occupations.” Emergencies, such as motor vehicle crashes, natural disasters, and acts of violence, will continue to create demand for EMTs. The elderly population will lead to an increase in age-related health emergencies, such as heart attacks and strokes. Again, increasing the need for EMTs. More and more military veterans are coming out into the job force most looking to go back to school to utilize their military experience in the civilian world another source to tap into to increase student demand for EMT programs.

During the 2015 spring semester, CMU had 30 applications for the EMT and EMR programs. The 2016 spring semester had a total of 52 applicants for the EMT and EMR programs.

Concern: I could not find the breakdown between the EMT and EMR programs to say exactly how many students were enrolled in the EMT program and how many were enrolled in the EMR program, I believe this would be beneficial to show the exact breakdown between the 2 programs instead of combining them. The partnership that was developed with Kinesiology should also be looked into with the other Health Sciences programs. Not tapping into the military veterans by offering a 12 credit program, which in turn could increase your demand. See recommendation 1.

## **E. Narrative summaries of resources**

### **1. Unique characteristics of the EMT program influencing the need for resources**

EMT programs are unique in a way that they are not run like a typical math or science class. EMT programs have additional needs to prepare hands-on practitioners. The following relates to the needs for faculty in the classroom as well as in the skill labs where the use of simulation manikins are used for practicing procedures. The Colorado Department of Health and Environment sets the educational standards along with National Registry of EMTs for faculty limits to student ratios which are: Didactic instruction to 1:20 and clinical or lab instruction to 1:6. Most EMT programs set a standard for their instruction to have a minimum of 3 – 5 years field experience along with EMS teaching credentials which for most CTE College programs is 4,000 hours of field experience and College teaching credentials. This usually requires certain classes that are offered through the Community College Instruction program.

Other needs include as mentioned above simulation manikins, learning and computer labs; maintaining student records of required immunizations, certifications, insurance, and background checks along with drug screens. Majority of all Health Science Programs require the same information so if it can be standardized for all programs requiring this information makes it easier for the student.

### **2. Faculty and Staff**

Currently, Debra Bailey is the Director of the Health Sciences and Pam Holder is the Program Director for Emergency Medical Responder (EMR) and Emergency Medical Technician (EMT) Programs. Pam is also one of the Primary Instructors, which does not allow her to focus on administrative issues as much as she should. Pam is also limited to the important meetings that would benefit her and the EMT Program, such as the 2+2 CCCS meetings that happen twice a year. All faculty members have at least 5 years of field experience and hold valid certifications above the level they are instructing. They have State certifications for the courses they are teaching. All paid employees have obtained, or are in the process of completing, credentialing through WCCC. The Instructors I spoke with during my review process were very supportive and enthusiastic about the EMT program and had the student's best interest in mind. They have revised the teaching methodology within all EMS courses to better utilize the concept of "flipping the class" and improve student learning outcomes. This has resulted in improved National Registry exam scores from 81% cumulative pass within 3 attempts to 86%. Students have written evaluations on instructors, but I could not find any current EMT Program evaluations from students on the program itself or the instructors. There has been changes over the last few years within the EMS courses with faculty and a Medical Director.

Concern: The Instructor list and credential's including the Program Director needs to be updated within the EMT program along with evaluations on current Instructors from students and the program director. The list that was given is from previous Instructors along with assessments, nothing with current employees. Also could not locate any information on the current Medical Director. Pam is limited to the administrative portion of the job with being a Primary Instructor also. See recommendation 3.

### **3. Physical facilities**

The EMT Program requires the same basic classroom needs as other disciplines with the exception of lab rooms. The DHS has a central location for the instructor offices and an office for the Director within the Maverick Center a building there on campus. The Clinical Education Center (CEC), this is where they keep their low and high fidelity simulation. The labs are equipped with 2 state of the art simulation manikins and a supply room where all the disposable equipment and hard equipment such as CPR manikins and AED machines are kept. The CEC lab rooms are set up with hospital type beds for hands-on learning experiences for all EMS students. Was not clear on where the didactic portion of the material was being instructed. I was shown a classroom but they did not state if it was used for EMT program. The physical resources seem to be sufficient to ensure the achievement of the program outcomes and meet the needs of faculty, staff and students. CMU is in the process of construction of a vacated Community Hospital building that will eventually become home to the health sciences program. They seem to be a little spread out throughout the CMU campus and with the affiliation they have with WCCC not understood how and what that campus will bring to the EMT program if any.

### **4. Instructional equipment, including information technology**

The EMT program uses the most modern technology and equipment. All classrooms are SMART classrooms, but was never clear which classrooms where for the EMT Program. Supplies are rotated out of service as they become obsolete and new technology is incorporated into the course. Faculty attend leadership training one a year for information on new technology within EMS system so that they can be up to date and current on the information they are instructing. There were updates completed in fall of 2014, of both email and Microsoft office, online resources through D2L, Ponopto, and videoconferencing of some lectures are current. As stated before the EMT program utilizes simulation manikins that are very tech savvy and they have a trained person who comes in to run the manikins, so the Instructors can focus on teaching and evaluating the students.

## **5. Library resources**

The library meets the needs of the faculty and staff through classic and contemporary books, journals and bound periodicals, videos, CD-ROMS, online reserve sources, online search engines and full text electronic journals. Faculty have input into the selection, development, and maintenance of learning resources. Electronic access to reserve the above resources is available to students and faculty. They try to keep the most current resources available to the students and have at least one hard copy of the current textbook. A collection assessment was completed in November 2015. Some of the recommendations that came out of that review was to review materials published pre-2010 for continued relevancy and accuracy, check for new editions of standard titles and encourage faculty to participate in selection process. They appear to be on task and have made some improvements with getting faculty involved and adding additional resources such as RapidILL and OCLC Resource Sharing.

## **6. Student learning outcomes and assessments**

In order to contribute to the institution-wide student learning outcomes the Emergency Medical Technician program encourages each student to perform at their best. All faculty members promote student success and teach so that each graduate will be able to:

1. Gather, identify and organize information on an EMS based topic addressing a course or discipline-related injury or illness. (Applied Learning; Specialized Knowledge)
2. Gather information and establish correct procedures and medications. Use program-level data and methods to understand, analyze, and explain issues in quantitative terms. (Intellectual Skills – Quantitative Fluency)

3. Collect and develop information in a well-organized, professional document and/or oral presentation that is appropriate for a specific audience. (Intellectual Skills – Communication Fluency)

4. Identify and gather the information/data relevant to the essential question, issue, and/or problem and develop informed conclusions.

(Intellectual Skills – Critical Thinking)

5. Demonstrate error recognition and the ability to correctly interpret patient signs and symptoms, and establish a course of action to solve problems and improve patient outcome. (Specialized Knowledge/Applied Learning)

CMU Emergency Medical Technician Certification faculty has determined the expected outcomes of the course and the acceptable level of performance as required from National Registry EMT standards. To measure if learning is taking place during the course assessment is embedded into the normal activities of the program. Direct assessments of the student are made the following ways: Writing activities, students are asked to write an eight page research paper on any topic they choose within the emergency medical field; multiple choice questions; essay questions blind scored by faculty across the department; group oral presentations;

standardized tests; projects; clinical experiences; simulations; and class scenarios. Indirect assessment is performed with interviews, surveys/questionnaires, and job placement/continuing education data.

Direct and indirect measurements that are used to assess student-learning outcomes:

Didactic:

Academic requirement for completion is 80% grade average.

Skills:

Demonstrate proficiency in all NREMT required skills and documented by sign-off sheets

Clinical:

Demonstrate completion of clinical rotations by documented National Registry sign-off sheets.

Clinical Rotations:

All clinical hours must be completed and documented by the instructor prior to final practical testing; failure to do so will result in a failing grade and you will not complete the requirements for certification. Incompletes are only allowed when there are extenuating circumstances.

Students are evaluated upon their successful completion of the following;

Emergency Department

Twelve hours of clinical rotation in an approved emergency department /or facility.

Documentation of clinical time will be required. (See course information packet).

Third Rider

12 hours with an approved fire department, private ambulance or both. Field patient contact will require a trip report. (See course information packet)

Patient Contacts

A minimum of 15 patient contacts must be documented and written in SOAP.

Other sources of measurement include the NREMT site that shows the course pass/fail rate against the national average:

A 5-year report shows CMU with an 86% pass rate for their students.

I found the student learning outcomes and assessments to be appropriate, clearly stated and measurable. This shows great strength within the EMT Program for quality assurance and improvement.

### **Recommendations**

1. The EMT Program is a CTE program and should be cost effective, which will increase the number of students applying (Value=Students). With changing the format to different sections it adds to the credits to the program making it a 12 credit program instead of a 10 credit program. This will allow military veterans to apply using their VA benefits and again increasing the enrollment.
2. The EMT program inter acts with the other EMS program including Law Enforcement but they do not participate with the Nursing Program students. By running an MCI scenario

the EMT program could transport their victims to a make shift emergency room with Nursing students there to take hand-off reports. The more inter-disciplines that can utilized the more realism can be brought in their training.

3. The faculty list and credentialing needs to be updated with current instructors including the Medical Director for the EMT Program.

#### **F. Strengths identified by the review**

Many years of experience, quality teaching experience and a very enthusiastic faculty that wants to enhance student learning and produce street ready EMT'S. Another strength is the network of support from the community healthcare providers to the staff. Many have worked for or are now actively working for an agency providing emergency care to the sick and injured. Having faculty that are still actively involved in the profession that students are seeking brings greater awareness for detail and contacts for future employment to the student. Running scenarios with the other EMS courses including Law Enforcement to bring about the reality of what they will be doing. The student learning outcomes and assessments very clear and has shown great strength for the quality assurance and improvement within the EMT Program. The increase in the number of students registering for the EMT courses and signing an agreement with the Kinesiology program to offer the EMT program for their students. The refinishing of the Community Hospital to offer more space to move the DHS department into will open up more space for the EMT program.

#### **G. Areas needing strengthen identified by the review**

With the increase in number of students wanting in the program class size is causing constraints for the instructor to be able to bring in all the equipment they need to add the kinesthetic learning to the lecture. They are being creative in their methods and integrating the practical application to fit into lab time or at the end of class instead of during the lecture. Utilization of campus space at CMU and making more availability to share equipment and lecture and skill space.

Faculty - with the increase in number of students wanting to take the courses, it appears necessary for more instructors to be added to the faculty. The Program Director needs to be able to focus on administrative duties, meetings and tasks and not be as involved in the teaching aspect. With the increase in student numbers lab personnel will need to be increased in order to maintain the integrity of the practical and skills portion of the curriculum.

Curriculum – Needs to be updated to be sure it is fitting in with the new sections that CCCS has developed for the EMT Programs.