**Program Review of the**

**Emergency Medical Services Training Program**

**SECTION 1 –OVERVIEW:**

***Narrative:***

Coconino Community College Emergency Medical Services is designed to prepare students for certification as an Emergency Medical Technician and ultimately Paramedic. This program gives a basic understanding of human anatomy and physiology, trauma, communicable diseases, and the impacts of decision making in emergency situations. Students completing EMS 131—Emergency Medical Technician-- are most frequently interested in becoming a firefighter, paramedic, Emergency room technician, or work with other related emergency services providers. Others utilize the program as a foundation for pursuing careers in other areas of healthcare such as nursing, physician assistant, and medicine.

EMS 100 is an introductory course preparing students for entry-level employment as a first responder, administering emergency care to sick and injured persons. This course is also highly recommended to students wishing to take EMS 131.

***Program mission statement***

The EMS training program endeavors to create a foundation for providers of pre-hospital medical care through rigorous training and testing of knowledge and skills associated with treating a variety of ailments and injuries.

The program includes both basic and advanced techniques of emergency care, stabilization, and immobilization of ill and injured patients. Recognition and documentation of signs and symptoms of illness and injury, intervention, and evaluation of the interventions are other areas of the program. Students begin with the Basic Emergency Medical Technology program and can continue on to the Advanced Emergency Medical Technology (paramedic) program.

***Staffing of the program***

Currently there is one half time (.5 FTE) Program Coordinator. The remainder of the program is staffed by ten (10) part-time instructors who team teach three (3) sections of EMS 131 (8 credits), one (1) section of EMS 100 (4 credits), and three (3) sections of EMT Refresher (equivalent to 2 credits) as well as twelve (12) Healthcare Provider level Cardiopulmonary Resuscitation courses (equivalent to .25 credits).

***Decision making***

Decision making is based upon the need to adhere to the 2009 National Emergency Medical Technician instruction curriculum, the National Registry of Emergency Medical Technicians guidelines, the Arizona Department of Health Services statues, American Heart Association protocols, and local Emergency Services Providers requirements (Ambulance services, fire departments, etc.). Administrative decisions are made in concert with the Dean of Career and Technical Education, the Program Coordinator, the EMS instructor cadre, and the EMS Advisory Council per committee.

***Summary of student assessment results since last program review and programmatic changes as a result of the assessment results.***

Looking at the previous 5 years of data from the National Emergency Medical Technician database, the EMS 131 course had an overall certification rate of 79% (423 of 589 students passed both the Psychomotor and cognitive National Registry exams). As a result of this assessment data, there have been few programmatic changes. However, the curriculum itself has evolved to be more rigorous with a greater emphasis on the more technical aspects of human anatomy and pathophysiology, and more advanced treatment protocols.

***A statement of the program’s accomplishments in support of the College’s current strategic plan.***

Maintained teaching standards with changing national standard curriculum for Emergency Medical Technicians resulting in national certification for our students, fulfilling the needs of the community for pre-hospital emergency medical care.

***A description of the current facilities needed to conduct the program, including space and equipment.***

Classroom and practical skills laboratories. A wide variety of equipment including simulation manikins, splinting and bandaging materials, diagnostic, and cpr/aed training implements.

**SECTION 2- TEACHING AND LEARNING:**

***Program requirements and course offerings***

## Outcomes

The outcomes identified below define the knowledge and skill sets that graduates of this program will possess at the end of their program of study.

**EMS 100 - Emergency Medical Responder**

The content of this course is based on the U.S. Department of Transportation (DOT) 2010 Emergency Medical Responder: National Curriculum. The course comprises information Emergency Medical Responders need to provide appropriate initial care, regardless of the type of emergency. The course stresses the emergency steps to follow until more advanced medical personnel can arrive.

***Course Objectives: As defined by the National Registry of EMTs the student will be able to:***

1. Explain how the EMS system works and how the Emergency Medical Responder’s role in the EMS system differs from a citizen responder’s role.
2. Describe the steps to ensure the well-being of the Emergency Medical Responder.
3. Identify guidelines to follow to ensure the personal safety and the safety of others at an emergency scene.
4. Explain what happens to the body if one or more body systems fail.
5. Identify ways in which diseases are transmitted and describe body substance isolation techniques to prevent disease transmission.
6. Describe when to move a victim in an emergency and the appropriate methods of doing so.
7. Explain and demonstrate how to assess a victim’s condition.
8. Recognize the signs and symptoms of breathing emergencies, such as airway obstructions and demonstrate how to provide proper care.
9. Identify the different types of breathing devices and demonstrate how to use them.
10. Recognize the signs and symptoms of a possible heart attack, and demonstrate how to care for someone who is experiencing persistent chest pain and/or other signs and symptoms of cardiac conditions.
11. Recognize the signs of cardiac arrest, and demonstrate how to provide proper care Cardio Pulmonary Resuscitation (CPR).
12. Recognize life threatening bleeding and demonstrate how to control it.
13. Recognize the signs and symptoms of shock (hypoperfusion), and describe how to minimize its effects.
14. Demonstrate the proper care for shock.
15. Recognize the signs and symptoms of medical and behavioral emergencies, including alerted mental status, seizures, poisoning, heat and cold emergencies, and stroke and describe both general and specific care for medical and behavioral emergencies.
16. Describe the common types of medical and trauma emergencies in infants/children and the elderly and describe the necessary care to manage these emergencies.
17. Explain the role(s) of the Emergency Medical Responder in EMS operations.

**EMS 131 - Emergency Medical Technician**

The purpose of the Emergency Medical Technician (EMT) course is to provide students with an academic and working knowledge to become state certified by passing the National Registry of EMTs and to be trained how to provide basic life support patient care. It provides the basic concepts of emergency care which are needed to function as an EMT. This class will be helpful for other healthcare fields and is a prerequisite for the Paramedic course.

The Emergency Medical Technician (EMT) provides basic life support care to critically ill or injured patients. EMTs work directly with another EMT to provide this level of care and in conjunction with a paramedic to provide advanced life support. EMTs learn to manage an airway using artificial devices, assess the severity of illness or injury, manage wounds and bleeding, immobilize fractures, perform CPR, utilized an automated defibrillator and a host of other procedures. Recent curriculum changes at the national and state level allow EMTs to assist with the administration of some medications.

EMTs are entry-level EMS providers. They are essential in the EMS chain of survival. Additionally, one must become an Arizona certified EMT before entering the Paramedic program (EMS 262).

**EMS 262 – Paramedic**

The purpose of the Paramedic course is to provide students with an academic and working knowledge to become state certified by passing the National Registry of EMTs and to be trained how to provide advanced life support patient care. It provides advanced concepts of emergency care which are needed to function as Paramedic.

At the completion of the course, the student shall have the cognitive and psychomotor skills to competently perform all skills of the EMT plus advanced airway management, surgical cricothyrotomy, needle thoracostomy, electrocardiogram interpretation, cardiac defibrillation/cardioversion/external pacing, intravenous access, intraosseous infusion, and administration of a wide range of medications. The Paramedic Program is broken into three Phases; Didactic, Clinical, and Field Internship.

ACLS, PALS and PHTLS certificate courses are incorporated throughout the program.

***The following tables provided by the National Registry of Emergency Medical Technicians***

|  |  |
| --- | --- |
| **Report Date:** | 4/1/2016 4:10:43 PM |
| **Report Type:** | Program Report (AZ-00005) |
| **Registration Level:** | EMT-Basic / EMT |
| **Course Completion Date:** | 4th Quarter 2010 to 4th Quarter 2015 |
| **Training Program:** | Coconino Community College (AZ-00005 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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** |
| 538 | 67% | 78% | 79% | 0% | 8% | 13% |
| (359 / 538) | (419 / 538) | (423 / 538) | (0 / 538) | (43 / 538) | (72 / 538 |

|  |  |
| --- | --- |
| **Report Date:** | 4/1/2016 4:16:37 PM |
| **Report Type:** | National Report |
| **Registration Level:** | EMT-Basic / EMT |
| **Course Completion Date:** | 4th Quarter 2010 to 4th Quarter 2015 |
| **Training Program:** | All |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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** |
| 362215 | 68% | 80% | 80% | 0% | 7% | 12% |
| (246820 / 362215) | (288179 / 362215) | (290606 / 362215) | (349 / 362215) | (26534 / 362215) | (45019 / 362215) |

***The following table provided by Coconino Community College Institutional Research indicates multiple factors about course enrollment data for the past five years.*** Table 1 below has been split for this Program Review.

**Enrollment as of Day 10 for each semester**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Columns |  |  |  |  |  |
|  | 2010-11 | 2011-12 |
| Courses | #Sec | #Enr | Tuition\* | #Sec | #Enr | Tuition\* |
| **EMS** | **14** | **234** | **$124,160** | **14** | **212** | **$133,962** |
| EMS 100 - EMS First Response | 2 | 25 | $6,000 | 2 | 17 | $4,233 |
| EMS 131 - Emergency Medical Technician | 8 | 169 | $108,160 | 8 | 158 | $104,912 |
| EMS 211 - Emergency Medical Tech Refresh | 3 | 39 | $6,240 | 3 | 32 | $5,312 |
| EMS 262 - Certified Emergency Paramedic | 1 | 1 | $3,760 | 1 | 5 | $19,505 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  | 2012-13 | 2013-14 |
| Courses | #Sec | #Enr | Tuition\* | #Sec | #Enr | Tuition\* |
| **EMS** | **11** | **195** | **$102,935** | **10** | **179** | **$98,049** |
| EMS 100 - EMS First Response | 2 | 23 | $5,865 | 1 | 13 | $3,393 |
| EMS 131 - Emergency Medical Technician | 6 | 133 | $90,440 | 6 | 126 | $87,696 |
| EMS 211 - Emergency Medical Tech Refresh | 3 | 39 | $6,630 | 3 | 40 | $6,960 |
| EMS 262 - Certified Emergency Paramedic |  |  |   |  |  |   |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  | 2014-15 | 2015-16 |
| Courses | #Sec | #Enr | Tuition\* | #Sec | #Enr | Tuition\* |
| **EMS** | **10** | **165** | **$121,258** | **7** | **153** | **$180,476** |
| EMS 100 - EMS First Response | 1 | 9 | $3,078 |  |  |   |
| EMS 131 - Emergency Medical Technician | 6 | 118 | $107,616 | 6 | 142 | $132,912 |
| EMS 211 - Emergency Medical Tech Refresh | 3 | 38 | $10,564 |  |  |   |
| EMS 262 - Certified Emergency Paramedic |  |  |   | 1 | 11 | $47,564 |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | Total #Sec | Total #Enr | Total Tuition\* |
| Courses |
| **EMS** | **66** | **1138** | **$760,840** |
| EMS 100 - EMS First Response | 8 | 87 | $22,569 |
| EMS 131 - Emergency Medical Technician | 40 | 846 | $631,736 |
| EMS 211 - Emergency Medical Tech Refresh | 15 | 188 | $35,706 |
| EMS 262 - Certified Emergency Paramedic | 3 | 17 | $70,829 |

|  |
| --- |
| *\* Tuition Notes:* |
| *Tuition is based on in-state tuition rates* |
| *Differential Tuition began 2014-15* |

***Credentialing***

National Registry of EMTs

Arizona Department of Health Services

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

***How often are course outlines reviewed and updated?***

Annually as a part of the Fire and EMS advisory council meetings

*Curriculum:*

**Coconino Community College adheres to the current National EMS Education Standards.**

The *Standards* define the minimal entry-level educational competencies for each level of EMS personnel as identified in the *National EMS Scope of Practice Model*. The *Standards* replaced the previous DOT National Standard Curricula (NSC). The *Standards* format supports diverse implementation methods and more frequent content updates.

*Articulation:*

Coconino Community College aligns the content of Paramedicine AAS degree to the BAS transfer pathway in partnership with Northern Arizona University. This program allows students who have earned an Associate of Applied Science Paramedicine degree from Coconino College to transfer up to 90 credit hours toward a Bachelor of Applied Science in Emergency Management to an Arizona public university.

*Teaching Loads:*

Instructors carry between 4 and 8 credit hour load per semester.

*SECTION3 – Staff, Resources, Facilities, and Funds*

*Internal factors:*

*What do you see as internal strengths of the program?*

The instructor cadre brings significant level of knowledge and experience in the field of emergency medicine to the classroom.

*What do you see as internal weaknesses of the program?*

No full time faculty. \*

This is a function of the fact that all instructors currently working full time as emergency care professionals and are only available to teach as part time faculty.

\* EMS 262 is taught through contract with Northern Arizona Healthcare and does employ full time personnel in this roll. They are not employees of Coconino Community College.

*List the recommendations from your last program review and any recommendations from Program Advisory Committees (if applicable).*

**SECTION 4—ANALYSIS AND RECOMMENDATIONS**

**Description**: Students enter this program with the intent of obtaining certification in the various levels of training contained within the EMS program. Cognitive testing is administered via Pearson Vue. Skills testing is conducted as a part of the final exams of each of the courses within the program.

**Assessment:**

* ***National Registry of EMTs Practical Skills examination***
* ***National Registry of EMTs Pearson Vue computer based examination for certification***

***Challenges:***

1. Not all students are able to complete the certification process at the end of the course for a variety of reasons but primarily that the complexity of the course material exceeds their ability to comprehend and retain the necessary knowledge and skills.
2. Students that have difficulty with the course materials do not have a good process for tutoring services due to the technical nature of the program content.

***Summary of Emergency Medical Services Program:***

While the EMS program is quite challenging for most students we are able to achieve an approximately 80% first certification rate for Emergency Medical Technician and nearly 100% certification rate for Paramedic.

The students that achieve these certifications are able to find employment within a variety of related fields including:

* Ambulance services
* Fire departments
* Park Service Rangers
* Emergency Department

Additionally the students that successfully complete courses within the EMS program are also highly successful in pursuing education and training in other related medical fields (nursing, phlebotomy, radiology technicians, et.al.).

# ***Appendix A Examples of Course Syllabi***

# SUBJECT: EMS 131 EMERGENCY MEDICAL TECHNICIAN

LOCATION: COCONINO COUNTY COMMUNITY COLLEGE, ROOM C-10

# CLASS MEETINGS: Tuesday 0830 to 1230 and 1330 to 1730

INSTRUCTORS: DAVID MANNING, CEP and Kevin Dobbe, CEP

 VOICE MAIL: 928-526-7680 (1-800-350-7122) ext 7680

 E-Mail: **david.manning@coconino.edu**

**1.** COURSE DESCRIPTION**: EMS 131 is an eight (8) credit hour course which will be a challenge for most students regardless of their prior academic experience. The course is designed to provide the student with an understanding of the principles and techniques of EMERGENCY MEDICAL CARE currently recognized as the responsibilities of the EMERGENCY MEDICAL TECHNICIAN. There will be a significant amount of class participation required by all students including hands on demonstrations and oral presentations.**

 **Additionally this course is designed to prepare the student for successful completion of the National Registry of EMTs certification exam. This exam is to be schedule by the student after the end of this course and is administered by the NREMT, not CCC. (See the website** [**www.nremt.org**](http://www.nremt.org) **)**

 **Students must earn a MINIMUM cumulative score of 75%, achieve a minimum grade of 75% on the final written exam, meet all attendance requirements and complete all out of class assignments in order to be eligible to take the NREMT certification exam. NO EXCEPTIONS**.

1. PRE-REQUISITES: **PRIOR TO THE FIRST CLASS MEETING THE STUDENT MUST MEET ALL OF THE FOLLOWING REQUIREMENTS:**

**(If any of these pre-requisites are not met on the 1st day of class the student will be dropped. NO EXCEPTIONS)**

1. **BE AT LEAST 18 YEARS OLD.**
2. **HAVE ALL IMMUNIZATIONS AS CURRENTLY REQUIRED BY NORTHERN ARIZONA HEALTHCARE**
* **HAVE A CURRENT “BLS-HEALTH CARE PROVIDER” OR “HEALTH CARE PROFESSIONAL” LEVEL CPR CARD. (AHA, NSC, ASHI OR AMERICAN RED CROSS)**
1. **VERIFIED 9TH GRADE READING COMPREHENSION LEVEL ( MAY REQUIRE A PLACEMENT EXAM ADMINISTERED BY CCC)**

**3.** ATTENDANCE**:**

Each class day consists of two (2) class meetings (a.m and p.m.) Attendance will be taken in the morning and again after the lunch break. If you miss both a.m. and p.m. sessions that will count as two (2) absences.

Attendance of all class meetings is essential. The instructor may drop a student after only two (2) unexcused absences. If you fail to attend classes your instructor will count you as absent. If you do not contact the lead instructor prior to the scheduled class meeting the absence will be marked UNEXCUSED (-25 points)

DO NOT HAVE A FRIEND OR ROOMMATE ETC. TELL ME YOUR MISSING CLASS. WE NEED TO HEAR FROM YOU DIRECTLY).

**The student will be ineligible to take the NREMT certification exam after four (4) absences (16 total hours of class time). This means that if you miss the equivalent of two (2) full days through the semester you will not certify as an EMT.**

 **TARDINESS WILL NOT BE TOLERATED -- DO NOT BE LATE**

 **See the CCC course attendance policy for more information**

1. IMPORTANT FINANCIAL AID NOTICE: **IF YOU ARE A FINANCIAL AID STUDENT AND EXCEED THE NUMBER OF ABSENCES FOR A CLASS, THE FINANCIAL AID OFFICE WILL BE REQUIRED TO REDUCE AND/OR REVOKE FINANCIAL AID DUE TO NON-ATTENDANCE, AND YOU WILL OWE MONEY BACK. YOU MAY ALSO BE SUSPENDED FROM RECEIVING FINANCIAL AID IN FUTURE SEMESTERS FOR FAILURE TO ATTEND YOUR CLASSES THIS SEMESTER. IT IS ESPECIALLY IMPORTANT THAT FINANCIAL AID STUDENTS ATTEND ALL CLASSES SO THAT THIS DOES NOT HAPPEN.**

**REGARDLESS OF WHETHER OR NOT YOU ARE A FINANCIAL AID STUDENT, IF YOU ARE GOING TO BE ABSENT FROM A CLASS, YOU NEED TO INFORM YOUR INSTRUCTOR THAT YOU WILL NOT BE THERE SO THAT THERE IS NO CONFUSION THAT COULD LEAD TO YOUR BEING DROPPED FROM CLASS AND/OR YOUR FINANCIAL AID BEING REDUCED OR CANCELED.”**

**5.** BREAKS**: BREAKS WILL BE TAKEN AT THE DISCRETION OF THE INSTRUCTOR AND WILL NOT EXCEED 30 MINUTES TOTAL PER CLASS MEETING.**

1. TEXT: **BRADY *EMERGENCY CARE, 12th ed* (THE ACCOMPANYING WORKBOOK IS OPTIONAL)**

**7.** GRADING SYSTEM **POINTS**

 **A = 90% - 100% 1035 - 1150**

 **B = 80% - 89% 920 - 1034 C = 70% - 79% 805 - 919**

 **D = 60% - 69% 690 - 804**

 **F = 59% OR BELOW 0 - 689**

**Expectations Paper = 25 POINTS**

**Reflections Paper = 25 POINTS**

**Exam #1 = 100 POINTS**

 **Exam #2 = 100 POINTS**

 **Exam #3 = 100 POINTS**

 **Exam #4 = 100 POINTS**

 **Exam #5 = 100 POINTS**

 **Exam #6 = 100 POINTS**

 **Exam #7 = 100 POINTS**

**Exam #8 = 100 POINTS**

 **FINAL EXAM = 200 POINTS (NO MAKE-UP FINAL -- NO EXCEPTIONS)**

**ATTENDANCE = 100 POINTS**

**\*\*\* (- 5 points per** tardy**. -10 points per** excused **absence. -25 points per** unexcused **absence)**

**8.** MANDATORY SPECIAL COURSE REQUIREMENTS:

* **COURSE EXPECTATIONS PAPER (due before the start of the 2nd day of class)**
* **COURSE REFLECTIONS PAPER (due before the start of the last day of class BEFORE FINALS. No early papers accepted)**
* **These papers are to be 750 words in length, typed and submitted to David Manning via CANVAS**
* **CLINICAL EXPERIENCE AT FLAGSTAFF MEDICAL CENTER EMERGENCY DEPARTMENT (5 HOURS)**
* **VEHICULAR FIELD EXPERIENCE AT GUARDIAN AMBULANCE (10 HOURS)**
* **ON LINE ICS 100 COURSE (certificate required)**
* **ON LINE IS 700 (certificate required)**
* **ON LINE HAZARDOUS MATERIALS FIRST RESPONDER AWARENESS COURSE (certificate required)**
* **WEEKEND PRACTICAL SKILLS EXAMINATION (Pass/Fail)**
* **All students must purchase an EMT STUDENT t-shirt (navy blue) at Cheap Clothes by the 3rd day of class.**

 **30 S. San Francisco St.**

**Flagstaff, AZ 86001**

 **The t-shirt can be long or short sleeve. You can also get a sweatshirt if you want to.**

* **It is recommended that students purchase their own stethoscope (many inexpensive options online)**
1. **The instructor reserves the right to make additions, deletionS, and modifications to THE syllabus and course requirements with reasonable notification to the student(s) enrolled. This material may be made available in an alternative format upon request by contacting the Disability Resources Office at (928) 226-4243 or 1-800-350-7122 (toll free in Arizona) or (TTY) (928) 527-8693**
2. **Should a student enrolled in the course require a special accommodation due to a disability in order to complete the requirements of the course, contact the Disability Resources Office at (928) 226-4243 or 1-800-350-7122 (toll free in Arizona) or (TTY) (928) 527-8693.**

# ***Appendix B Job Description of Full Time Faculty***

No full time faculty