



ACADEMIC PERIODIC PROGRAM REVIEW

Date: April 3, 2018

Name of degree(s) and/or certificate(s): Paramedic Certificate; Paramedic AAS; EMS 222 course

Department: EMS

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Identity

Who are you as a department and program? Whom do you serve? What are your plan and purpose?

HISTORY AND CONTEXT

Provide a brief history and description of the department and programs offered in the department, including degrees and certificates.

Include the year that the program was implemented, the accrediting agency (if applicable), and the year of the most recent program/accreditation review.

Mohave Community College (MCC) was established as a county college by a vote of the people on November 3, 1971. Recognizing the vastness of the service area (13,479 sq. miles), the first Board of Governors made an initial commitment to establishing three main campus sites. In 1974 Mohave Community College became part of the Arizona State System of Community Colleges. In 1981, MCC received full accreditation from the North Central Association of Colleges and Schools (NCA). Today, MCC includes four on-ground campuses, each interconnected with state-of-the-art telecommunications system, as well as an extensive online Distance Education component.

In 1990, the curriculum and instruction committee of Mohave Community College agreed to create a college based paramedic program and began working with the Arizona Department of Health Services to outline the curriculum. Within that effort, MCC developed and offered the Emergency Medical Technician-Paramedic Program in an effort to meet staffing needs of service providers throughout Mohave County. Prior to the establishment of MCC's Paramedic Program, the only other available programs providing paramedic level education were located over 200 miles away in the greater Phoenix area. The remoteness significantly limited the accessibility of paramedic training in Mohave County. Local agencies voiced a need for a locally based paramedic training program to meet the needs of the growing districts in Mohave County.

In 2009, MCC researched accreditation opportunities to ensure the quality of programming and initiated steps toward accreditation through the Commission on Accreditation of Allied Health Educational Programs.

In 2013 MCC received initial accreditation through the Committee on Accreditation of Allied Health Education Programs (CAAHEP). In 2015 a continuing accreditation self-study was submitted to the Committee on Accreditation of EMS-Paramedic Programs, with a site visit following in June of 2016. At the conclusion of the site visit, the recommendation was made from the site visit team for the college to pause their paramedic education program until a qualified director could be found. The new director was hired and started working on a complete restructuring of the paramedic education program in October of 2016. The new program enrolled students in January of 2017 with a cohort of 12. 11 students successfully completed the program with a first attempt NREMT Paramedic CBT exam pass rate of 82%. The overall pass rate is currently at 91% on the CBT exam. Another cohort started at our BHC campus with 7 students in the cohort starting August 2017. Additional cohorts currently in progress are NCK – 7 students; LHC – 3 students, and NMC – 23 students. These cohorts started simultaneously in January of 2018.

Initial EMT education has also been offered through MCC for many years. The EMS 222 course is offered on all southern campuses each semester and at NMC when needed.

How are you achieving your plan and purpose? How effectively are elements and resources being used?

A. ACADEMIC PROGRAM

1. Program Student Learning Outcomes

- a. State the Program Student Learning Outcomes (SLOs) as they exist on the degree Guided Pathway (Appendix A). Explain any changes that have been made during the last four years. Are the SLOs an effective statement of expectations for all graduates? Beyond the catalog and Guided Pathway, how are these expectations communicated to students?

1. <i>Graduates will demonstrate consistent honesty, be able to be trusted with property and confidential information, complete and accurately document patient care and learning activities. (1, 2, 4, 5, 6)</i>
2. <i>Graduates will demonstrate compassion toward others, responding appropriately to emotional responses, and demonstrate respect to others, being supportive and reassuring. (1, 2, 4)</i>
3. <i>Graduates will demonstrate self-confidence and self-motivation while performing skills at an entry-level capacity. (1, 2, 3, 4)</i>
4. <i>Graduates will operate within the paramedic scope of practice demonstrating patient advocacy, careful delivery of service, and professional appearance. (1, 2, 3, 4, 5, 6)</i>
5. <i>Graduates will communicate utilizing communication and interpersonal relationship skills with patients and other members of the healthcare team. (1, 2, 4)</i>
6. <i>Graduates will manage the use of time and other resources to complete tasks and attain goals. (2, 5, 6)</i>
7. <i>Graduates will demonstrate, at all times, a safe, efficient environment that promotes teamwork to complete tasks. (2, 3, 4, 6)</i>

Prior to Spring 2017, there were no program Student Learning Outcomes. Based on changes to the curriculum, outcomes were created and mapped. Further outcome changes may be made after an assessment of cohorts who complete the program. These SLOs are communicated to students in the EMT or Paramedic student handbook, which is in the process of major revision.

- b. Program SLO alignment to General Education Philosophies: Review the General Education Philosophies alignment to the Program SLOs. Are students able to achieve the General Education Philosophies and Program SLOs at the expected levels by completing the major courses and the general education curricula? Do the knowledge and skills developed in required courses build on each other in an intentional, progressive manner?

Yes, students are able to achieve the outcomes related to the General Education Philosophies within the program.

Students' knowledge and skills are developed and build on each other as indicated in the outcome maps.

- c. Review degree Program Goal Map (Appendix B). Analyze any patterns, imbalances, or gaps. Evaluate the SLOs in the context of the curriculum, assessment planning, and the student experience. Are there any specific revisions that can be made to strengthen your Program SLOs?

All outcomes are introduced in EMS 240 and are assessed in the EMS 244 course.

2. Curriculum

- a. Summarize the program degree requirements as published in the current catalog. What is the relationship between major and GE courses? Are there any free or defined electives? Are courses reliably offered in the required/recommended sequences? If not, why not? How does the overall curriculum compare with those of colleges in Arizona?

During program assessment, the AAS degree was modified to require Medical Law and Ethics as the critical thinking and reasoning course requirement in the AAS checklist. Students have a choice of completing BIO 100 or 181. Students can also take HES 113 and 129, or BIO 201 and 202. These courses are reliably offered in the required/recommended sequences. The MCC paramedic AAS degree program has less General Education requirements and 12 fewer credits overall as compared to another community college in Arizona.

- b. Describe any significant changes made to the curriculum since the previous program review — delivery, mode, prerequisites, structure, etc. Have you adopted any new practices in course design such as “flipping,” or the conversion of traditional face-to-face courses to online or hybrid modes? Have any of these changes been successful? How do you know?

While the MCC EMS program has not previously completed a program review, there have been major changes made in the program since Fall 2016, after the continuing accreditation self-study and site visit. The Gen-Ed requirements have been reduced and are more focused on allied health education. The paramedic course-specific outcomes and competencies have been redesigned to align with the National EMS Education Standards as required by programmatic accreditation.

- c. What process does the department use to revise and update curricular content? How does the department assure the currency of course documents, e.g., proposals, syllabi, and outlines? How do you provide for course alignment of the same course taught by multiple instructors?

Master course schedules are prepared by the director and distributed to all faculty. Program accreditation and state approval require EMS education programs to follow the curriculum found in the most current edition of the National EMS Education Standards. Revisions and updates are made when standards are revised and updated. After each course (EMT) or program (Paramedic) completion, an assessment analysis is conducted to determine if the master schedule and sequencing need revision.

3. Co-Curriculum

Describe any significant co-curricular opportunities for students in the major. How do these opportunities support student learning in the curriculum?

There are no current opportunities. Conversations are being held regarding a student organization related to public safety, which could incorporate other programs as well as EMS.

B. FACULTY

Does the department assess and plan for the need for future faculty hires? What kind of challenges has the department faced in terms of recruitment, hiring, and retention? Describe the department’s projected faculty hiring needs within the next four years. Reflecting on the teaching contributions, scholarship, service, and areas of expertise of the current faculty how well are the overall needs of the program being met?

The most significant challenges facing department staffing relates to a lack of qualified applicants. Accreditation requirements are specifically related to education and experience, and our last hiring attempt for a Resident Faculty/Clinical Coordinator only resulted in 2 applications with neither candidate meeting all of the minimum requirements.

The program has recently been approved for a resident faculty position for the 2018-2019 academic year, due to enrollment growth in the paramedic certificate program. Consistency across all campuses in the instruction area will benefit students and associate faculty alike. This position can also work with EMT associate faculty as this particular course is currently under scrutiny from the AZ Department of Health Services Bureau of EMS (AZ DHS BEMS), related to less than acceptable success rates on the NREMT CBT exam for EMT-Basics.

C. DEPARTMENT ADMINISTRATION

1. Describe the structure of administration within the department, including how leadership is selected and length of term. How does the department plan for succession?

Not applicable

2. What are some current key priorities of the director/lead? What other administrative duties require significant attention or time? What kind of assign time is used for administrative duties for other faculty in the department (e.g., scheduling, assessment, etc.)?

Program administrative duties are currently all handled by the Director. This is due to many faculty not meeting the accreditation requirement of lead instructor status where duties can be delegated.

D. FACILITIES, EQUIPMENT, AND INFORMATION RESOURCES

1. Facilities

- a. Describe any specialized facilities of the program. Do these facilities meet the current needs of the program? Describe any proposed changes and improvements to resources.

There are no specialized facilities available to our students at this time. Mohave Community College has an excellent opportunity to develop a premier public safety training facility for Fire and EMS education programs as well as other potential public safety training. Directors of both Fire and EMS programs are committed to working together to enhance training opportunities for public safety students, organizations and the community as a whole.

- b. Describe any departmental sustainability efforts in regards to facilities or equipment.

Sustainability of facilities and equipment for public safety training require appropriate equipment and maintenance, and a 5-year plan related to equipment purchase, maintenance, and replacement. This could be accomplished through grants, capital improvement projects and appropriate use of course fees collected for these programs.

2. Equipment, Technology, and Information Resources

- a. Does the current equipment and technology meet program needs? What plans or funds exist for obtaining new resources, maintenance, repair, and replacement? Provide a ranked list of high-priority equipment needs.

High-Priority Equipment needs:

Tables and chairs to facilitate student lecture and lab experiences are a critical need at NCK. The pod chairs do not accommodate students for extended class periods (8 hours), and are not usable for lab equipment at all, as they tip over when equipment is placed on the table portion.

Medium fidelity full body adult simulators are needed at NMC, LHC, and NCK. BHC recently received a medium fidelity simulator for the EMS program through Legacy foundation matched funds from MCC.

Medium fidelity full body child simulators are needed at all 4 campus locations.

Medium fidelity full body infant simulators are needed at all 4 campus locations.

Medium fidelity obstetrics (OB) manikins are needed at all 4 campus locations

12 lead cardiac monitor/defibrillator/pacing/cardioversion devices are needed at NMC, LHC, NCK, and BHC. Based on 2017-2018 enrollment numbers we need 3 per campus minimum and we currently have 1 at BHC and 1 at NCK. (10 needed to meet student numbers requirements for EMT and paramedic)

Additional airway manikins needed to meet AZ DHS BEMS requirements for equipment for EMS training programs. While there are 2 per campus currently, all are in poor condition and need to be replaced.

Additional intravenous (IV) and Intraosseous (IO) task trainers are needed to allow student practice in small groups.

- b. Describe key information and technology resources — books, journals, databases, etc. — used by the program. Do the resources meet program needs? Provide a ranked list of high-priority information-resource needs.

Currently, the EMS program receives complimentary desk copies of texts related to the program, with the exception of provider card courses through the American Heart Association (AHA) and the National Association of EMTs (NAEMT). The AHA and NAEMT require instructors to purchase their instructor texts and do not provide desk copies. The Journal of Pre-Hospital Emergency Medicine is the recommend peer-reviewed journal for pre-hospital programs and should be available through the library on each campus.

Students in EMT courses do not have access to tablets except on the NCK campus, where the iPad cart is stored in the EMS storeroom. Numbers of EMT students often require more than one computer lab for student proctored testing, and this could be better accomplished in the classroom with tablet devices or laptop carts being utilized.

Current learning management system (LMS) does not allow for attendance tracking. EMS programs are required to maintain records of student attendance based on hours present in class. The LMS does not allow instructors to track actual hours of attendance and generate reports for accreditation and state AZ DHS BEMS accountability. Currently, we are still utilizing student sign-in sheets on paper, and these hours are tracked in an Excel spreadsheet and all documents are maintained for inspection per accreditation and AZ DHS BEMS guidelines.

Master courses are set up by the director and then copied to each course shell. When copying over, assignment dates and grading categories default to none, and then must be reconfigured by instructors

and director. This is a drain on the instructors and the director and is a waste of time. Once the master shells are constructed, copying these dates over would allow for all courses to have the same information and availability to students and instructors alike.

Resources available do not currently meet program needs.

- c. What is the role of the library in relation to your program? To what extent does your faculty interface with library faculty, CELT, IT?

Currently, EMS students do not utilize library often. This is an accreditation requirement for libraries to maintain texts and journals for student accessibility. Research in EMS is a growing requirement for national EMS education standards and future students will need available journals and books in the libraries on all campuses.

CELT staff works with director and instructors as needed, however as previously stated, the current LMS is lacking for the ability to manage accreditation requirements.

IT interaction is based on need. Several times IT tickets have been filed with lengthy wait times or no resolution of needed issues.

E. BUDGET

- a. Provide a summary of total budget revenues and program expenditures (salaries, benefits, operating expenses) for the last 2-3 years as available (Appendix C). Describe any significant increases or decreases in the cost of the program over the review period, noting factors that may be influencing costs. Include copies of annual budgets, as available.

For the period of 2014-2016AYs, student sections and enrollments have decreased, while overall cost has increased. Specifically for the 2016AY, this is a result of the recommendation from the CAAHEP accreditation site visit team that the paramedic program be paused until a qualified director was located and the program reconfigured.

2017 has seen a growth in both paramedic and EMT student enrollments, and for the first time, MCC's paramedic program is being offered on multiple campuses. The need for EMS education in Mohave County and surrounding areas is still at a high demand.

- b. How are decisions about program funding and expenditures made? Describe your department budget process and engagement of faculty in that process.

Through analysis of student enrollments, student course fees collected, and overall available budget. Annual budget review process solicits input from faculty regarding program needs on each campus, and this information is used to prepare requests for the next academic year budget.

Program Effectiveness

How Well Do You Achieve Your Plan and Purpose?

A. STUDENT LEARNING ASSESSMENT

1. Assessment Overview

- a. Provide an overview of your program-level assessment efforts (see program goal map for courses program level assessment occurs) during the last four years. How comprehensive were your assessment efforts? Can you state with confidence that your graduates are achieving the Program SLOs at the expected levels?

EMS programs are required to evaluate student performance in the cognitive, psychomotor and affective domains. Cognitive high-stakes exams consist of specific unit exams which are determined through analysis to be reliable and valid exams. Students take specific unit exams in each of the paramedic course and are then re-evaluated on the same exams in EMS 244 for mastery. Students must achieve program cut scores with or without minimal remediation.

Psychomotor competency is assessed throughout the program utilizing the required National Paramedic Psychomotor Competency Portfolio. Students begin the program working on skills development, then incorporate skills and assessment into simple scenarios. More complex scenarios are utilized as the student progresses through the program. Final assessment in EMS 244 the student is assessed utilizing Oral review boards, trauma patient assessment, static and dynamic cardiology and an integrated-out-of-hospital scenario. Students must achieve the minimum competency score on all of these specific topics without triggering any critical failure points.

The affective domain is also introduced in EMS 240 and students are evaluated throughout the program on the eleven points of professional behavior for EMS providers. Students must be determined competent in all 11 categories to pass the affective domain.

Based on all of the above assessments, the EMS program can state with confidence our students are achieving the program SLOs at expected levels.

2. Assessment Efforts

Describe your Cycle of Learning assessment efforts. Include your 4-year assessment plan in (Appendix D). If you submitted Cycle of Learning assessment reports, include the in Impact on Student Learning and Action Plan for each in Appendix E. (Copies can be found in the Schoology Curriculum and Assessment group resources). Generally, consider the following questions:

- Which General Education Philosophy(s) did the assessment address?
- When and where in the curriculum did the assessment take place?
- What form did the assessment take?
- What were the results of the assessment? Did students meet expected levels of performance?
- How were the results used to improve the degree program?

Under the former director and interim director, cycle of learning assessments and reports were not completed as expected. A new assessment plan is attached in Appendix E moving forward.

3. Writing Across the Curriculum

Describe your Writing Across the Curriculum assessment efforts. Include your WAC data worksheets in Appendix F. (located in the Schoology Curriculum and Assessment group resources). In each case, consider the following questions:

- When and where in the curriculum did the assessment take place?

- What form did the assessment take (portfolio, a collection of smaller writing samples, large essay/term paper)?
- What were the results of the assessment(s)? Did students meet expected levels of performance?
- How were the results used to improve the degree program?
- Will the Identified course change based on your analysis?

Under the former director and interim director, Writing Across the Curriculum assessments and reports were not completed as expected. Moving forward WAC assessments and data collection will take place as expected.

4. Assessment Planning

- Draft or revise the program assessment plan for the next four years, drawing on the Program SLOs and their mapping to the curricula on the Program Goal Map. Include this plan in Appendix G. If you don't have a current plan, contact the Director of Assessment and Curriculum for a template. Will the draft plan allow you to state with confidence that your graduates are achieving the Program SLOs at the expected levels?

Yes

- To achieve your assessment plan, the department may need to develop greater assessment capacity. Describe any support or training that will help your faculty and staff to carry out the plan successfully. What is the department's or college's appropriate role in providing these opportunities for professional development?

Curriculum Director will need to provide assessment information to program faculty and staff.

B. STUDENT SUCCESS: ENROLLMENT, PERSISTENCE, AND GRADUATION

1. Enrollment

- Analyze trends in enrollment data for each of the last four academic years (Appendix C). How does the student enrollment in your program compare the college enrollment? How does the quality of students enrolled (in looking at GPA, SAT, placement exam scores) compare to that of the college? Is the program enrolling the number and quality of students desired?

EMS program enrollment and completion is comparable to other programs at MCC.

With continued program revision and assessment, quality of the program will increase enrollment and the quality of students enrolled in the courses and programs.

2. Transfer Students

Analyze trends in transfer student enrollment data for each of the last four academic years (Appendix C). How does the student enrollment in your program compare the college enrollment?

This program currently does not have notable transfer student numbers.

3. Fail Rates

- Do you have any courses that have high failure rates (Ds, Fs, and Ws > 10%)? List courses and supporting data. Have you explored the reasons and possible solutions to improve student success?

2016 statistics show a 20% overall WDF rate, which equates to 3 students. The AZ DHS BEMS Rule states that students completing a paramedic education program have 3 attempts to score 75% or better on the

program comprehensive final exam, or they fail the program and are not eligible to complete national certification. The MCC Paramedic program previously only allowed students 2 attempts at the comprehensive exam, while state rule allowed 3. Exam has been rewritten and improved, for reliability and validity, and the most recent cohort had a 100% program pass rate in 2017.

C. STUDENT ENGAGEMENT AND SATISFACTION

1. How are students engaged in the program review process (e.g. do reviewers have the opportunity to meet with students, is there a student review team, etc.?)?

Prior to 2017, no students were part of the program advisory committee. This is an accreditation requirement, so we now have a student representative and a recent graduate on the advisory committee. Current students and graduates participate in the site visit review by the CAAHEP site visit team.

2. In what ways does the department engage students about their experience in the program or involve them in the development of the program? Are students involved in the operations and/or policy development for the department (e.g., committee membership, other formal and informal input)? What has been learned from student input?

CAAHEP requirements state a resource assessment survey (RAS) must be completed by all students in the program. This is done during EMS 244. Once students graduate, they are sent a graduate survey six months post-graduation in order to assess the student's perspective of their preparedness and employment. Resource assessment surveys were not completed prior to 2017.

3. How satisfied are students with their experience of the curriculum, faculty, learning resources and environment, and administration? Describe methods used to collect student input such as focus groups, surveys, etc.

Student satisfaction under the old curriculum was poor. Students enrolled in the new program express satisfaction in the course content and delivery. Students also can offer suggestions for improvement.

One page paper course satisfaction surveys are currently utilized. Program RAS surveys are done during EMS 244 course.

D. GRADUATE SUCCESS

1. Recent Graduates

- a. Describe the most recent program-level results of the completion rate (Appendix C). Consider the numbers and percentages of graduates employed full/part-time, seeking/not seeking employment, or transferred to the universities, as well as other information about their jobs or schools. How successful are students in obtaining jobs or university transfer after completion of their degree?

Limited data prior to 2017 is available. CAAHEP requires graduate and employer surveys sent to graduates 6-12 months post-completion. Prior to 2017, these were not done. The plan moving forward is to send graduate and employer surveys 6 months post-completion. Scheduled for June 2018.

- b. Describe any other feedback from graduates or measures of graduate success used by the department, e.g., the results of professional exams, certification/ licensing/ registration rates, and numbers of graduate degrees awarded. What do these measures suggest about the program and its graduates?

Paramedic

NREMT CBT Pass Rates Paramedic												
Campus	completed students	attempted students	pass	pass	pass	pass	pass	pass	% success			
			1st att	2nd att	3rd att	4th att	5th att	6th att	1st att	within 3	within 6	
2015		9	7	2						78%	100%	
2016		9	3	2						33%	56%	
2017	11	11	9	1						82%	91%	

EMT

NREMT CBT results EMS 222 FA 17												
Campus	completed students	attempted students	pass	pass	pass	pass	pass	pass	% success			
			1st att	2nd att	3rd att	4th att	5th att	6th att	1st att	within 3	within 6	
LHC	16	12	7	2						58%	75%	
BHC	16	13	5	0						38%	38%	
NCK	11	7	4	2						57%	86%	
TOTAL	43	32	16	4						50%	63%	

Paramedic program statistics for previous 3 years are shown above. 2017 pass rates show improvement over the previous year. This indicates changes made after site visit recommendations in 2016 have been successful. Evaluation is ongoing.

EMT program statistics are shown in EMT table. Current NREMT pass rates are well below state requirements of 80%. Additional professional development and data are being provided to specific instructors to generate improved success. Evaluation is on-going.

2. Alumni

- a. Describe the results of any alumni surveys from the last four years. To what extent do respondents report that their experience of the program has helped them to succeed in their personal and professional lives?

See statement above regarding graduate surveys.

- b. Describe any other measures used to obtain feedback from alumni. What do these measures suggest about the program and its graduates?

Also seen in prior sections.

3. Employers

- a. Describe the results of any community employers' feedback. What does their feedback suggest about graduate success in terms of Program SLO achievement, industry readiness, employer values, salary scales, etc.?

Not done prior to 2017. Required by CAAHEP 6-12 months post-completion. Schedule for June 2018.

- b. Describe any other measures used to obtain feedback from employers. What do these measures suggest about the program and its graduates?

Not applicable.

E. S.W.O.T ANALYSIS

After assembling an Advisory Committee consisting of department resident faculty, associate faculty, non-discipline faculty, student, alumni, academic support staff, community/industry members (if applicable), and faculty from departments in which your courses feed into(if applicable), answer the following questions:

- a. SWOT analysis was not done at the December 2017 advisory committee. This will be re-looked at during the April 2018 meeting

Future Trends and Capacity

How are current and future trends being taken into account by the program?

A. FUTURE OF THE FIELD AND CAREER OPPORTUNITIES

How is the program meeting the current and potential future needs and trends in the labor market, industry, and society? What is the bureau of labor statistics (as well as other sources) predicting? What other new areas/fields do you predict will be developing in the future related to your discipline? What will be the jobs of the future?

Bureau of Labor Statistics shows in Arizona an increase of 28% job openings between 2014-2024.

Community Paramedicine programs are on the forefront of pre-hospital medicine and will potentially add additional educational opportunities for students. Critical-care and flight paramedic opportunities also require additional training.

B. PROGRAM CAPACITY

What is the program's capacity to educate more students? Are there adequate faculty, staff, facilities and other resources to meet the demand? If not, describe what additional resources are required.

Past history of paramedic education has been a single campus program. Expansion to all four campuses has occurred, with potential for continued growth. Improvement in student success on national certification exams will continue to promote program success.

College Mission and Goals

What Are the Critical Issues? How Do They Impact the Department and Program?

A. COLLEGE MISSION AND GOALS:

1. The mission of Mohave Community College is to be a learning-centered institution, serving all constituencies, inspiring excellence through innovation and empowering students to succeed.
2. Mohave Community College strives to provide high quality, affordable and accessible higher education to all who seek it. Educational: Mohave Community College supports an academic learning-centered community through implementation of quality teaching initiatives, professional development, integration of learning technology, development of partnerships, delivery of effective student support services, and by providing accurate information and advising. Cultural: Become a conduit between businesses, organizations, foundations and the arts to strengthen understanding of the world through education. Civic:

Promote active citizenship within the college community. Resources: Provide resources needed to achieve the mission and vision

3. How current and relevant is the mission and goals to your program?

MCC's mission and goals integrate with development of specific program mission and goals.

4. How do the college mission and goals shape the decisions and direction of the department and program?

EMS program is also learning-centered, and are increasingly implementing innovative strategies to allow students to succeed.

B. PROGRAM GOALS

1. Previous program goals.

Briefly describe the results of the previous program review -issues identified, recommendations made, and goals. Describe significant achievements and progress made since the last program review. What proposed changes have not been made and for what reasons?

No previous program review

2. New program goals.

- a. Short-term goals (two-year cycle): Based on data, assessment, and curriculum analysis completed above, identify 2 or more Specific, Measurable, Attainable, Relevant, Timely (S.M.A.R.T) Goals, measurable outcomes, and activities that you would anticipate resulting in improvements to the program in the next two years.

- ii. Goal 1: Increased paramedic student enrollments

1. Measurable outcome: maximize student enrollment at 12 per cohort

2. Plan to achieve the outcome within 2 year period:

- a. Increased marketing efforts

- b. Program interest meetings in communities and campuses

3. Responsible parties:

- a. Director and MPIO

- b. instructors

4. How does this goal align with the mission and goals of the college?

- a. Significant community needs for increased paramedic program offerings.

- iii. Goal 2: Adequate equipment to support program success

1. Measurable outcome: meet the minimum standards for AZ DHS BEMS equipment requirements for ALS and BLS education programs.

2. Plan to achieve the outcome within 2 year period:

- a. Budgetary review and requests

- b. Research grant funding opportunities

- c. Utilize all collected student course fees

3. Responsible parties:

- a. Director and Administration

4. How does this goal align with the mission and goals of the college?

- a. Up-to-date equipment to meet the best practice of pre-hospital care increases program and student innovation in patient care.

- b. Long-term goals (four-year cycle)

- i. Goal 1: Improve student pass rates on NREMT CBT exam

1. Measurable outcome: EMT NREMT CBT exam pass rate increase to 70% year one and 80 % year two overall.
 2. Plan to achieve outcome within 4 year period:
 - a. Increase instructor knowledge of national standards and requirements by providing professional development opportunities.
 - b. Program-specific training related to EMS education
 3. Responsible parties:
 - a. Director
 4. How does this goal align with the mission and goals of the college?
 - a. Empowering student success and employability.
- ii. Goal 2: Public-safety training center
1. Measurable outcome: Provide central training facility for public safety education
 2. Plan to achieve the outcome within 4 year period:
 - a. Develop a plan to analyze community needs and location
 - b. Identify funding resources
 - c. Secure location based on results of the assessment
 3. Responsible parties:
 - a. EMS Director
 - b. Fire Science Director
 - c. Administration
 4. How does goal align with the mission and goals of the college?
 - a. Inspiring excellence through innovation

Appendices

- A. Guided Pathway(s)
- B. Program Outcome Map(s)
- C. Institutional Research Data - Budget, Enrollment, Course and Degree completion and success rates
- D. Assessment Plans – Looking Back – 4-year Assessment plan
- E. Assessment Plans – Looking Ahead – Draft next 4-year Assessment plan

GUIDED PATHWAY

The following sequence is the suggested pathway to complete the degree in two years. This sequence is based on satisfaction of all basic skills requirements and prerequisites and presumes a fall start date. An individual's program may vary depending on transfer institution, career objectives, or individual needs. See your academic advisor for other options and to monitor your progress.

Program Name: Paramedic Certificate

Program Student Learning Outcomes (SLOs):

1. Students will demonstrate consistent honesty, be able to be trusted with property and confidential information, complete and accurately document patient care and learning activities. (1, 2, 4, 5, 6)
2. Students will demonstrate compassion toward others, responding appropriately to emotional responses, and demonstrate respect to others, being supportive and reassuring. (1, 2, 4)
3. Students will demonstrate self-confidence and self-motivation while performing skills at an entry level capacity. (1, 2, 3, 4)
4. Students will operate within the paramedic scope of practice demonstrating patient advocacy, careful delivery of service, and professional appearance. (1, 2, 3, 4, 5, 6)
5. Students will communicate utilizing communication and interpersonal relationship skills with patients and other members of the healthcare team. (1, 2, 4)
6. Students will manage the use of time and other resources to complete tasks and attain goals. (2, 5, 6)
7. Students will demonstrate, at all times, a safe, efficient environment that promotes team work to complete tasks. (2, 3, 4, 6)

Courses – Asterisk (*) indicates required program courses	AGEC course?	Terms	Credits
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First Semester: Fall

EMS240 *		F, SP	6
EMS241 *		F, SP	6

Courses – Asterisk (*) indicates required program courses	AGEC course?	Terms	Credits
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Second Semester: Spring

EMS242 *		SP, SU	6
EMS243 *		F, SP	6

Courses – Asterisk (*) indicates required program courses	AGEC course?	Terms	Credits
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Summer term:

EMS244 *		F, SU	8
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Key:

SP= Spring F= Fall SU= Summer

1. Aesthetic Sensibilities: An awareness of creative expression in the world around us.
2. Communication Skills: The ability to effectively convey meaning through various media on both personal and professional levels.
3. Critical Thinking Skills and Problem-Solving: The ability to analyze data and arrive at logical and defensible conclusions.
4. Cultural Diversity and Global Awareness: An appreciation of relationships and differences in values, customs, and norms of diverse global communities.
5. Techniques of Inquiry: Use of standardized methodological framework to collect, analyze, interpret, and present findings.
6. Technological Competency: A proficiency in evolving technology to compete and flourish in society.

Total credits

32

GUIDED PATHWAY

The following sequence is the suggested pathway to complete the degree in two years. This sequence is based on satisfaction of all basic skills requirements and prerequisites and presumes a fall start date. An individual's program may vary depending on transfer institution, career objectives, or individual needs. See your academic advisor for other options and to monitor your progress.

Program Name: Paramedic, AAS

Program Student Learning Outcomes (SLOs):

1. Graduates will demonstrate consistent honesty, be able to be trusted with property and confidential information, complete and accurately document patient care and learning activities. (1, 2, 4, 5, 6)
2. Graduates will demonstrate compassion toward others, responding appropriately to emotional responses, and demonstrate respect to others, being supportive and reassuring. (1, 2, 4)
3. Graduates will demonstrate self-confidence and self-motivation while performing skills at an entry level capacity. (1, 2, 3, 4)
4. Graduates will operate within the paramedic scope of practice demonstrating patient advocacy, careful delivery of service, and professional appearance. (1, 2, 3, 4, 5, 6)
5. Graduates will communicate utilizing communication and interpersonal relationship skills with patients and other members of the healthcare team. (1, 2, 4)
6. Graduates will manage the use of time and other resources to complete tasks and attain goals. (2, 5, 6)
7. Graduates will demonstrate, at all times, a safe, efficient environment that promotes team work to complete tasks. (2, 3, 4, 6)

Courses – Asterisk (*) indicates required program courses	AGEC course?	Terms	Credits
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First Semester: Fall

HES 113		F, SP, SU	3
HES 129		F, SP	3
MEA 100*		F, SP, SU	3
BIO 100	Yes	F, SP, SU	4

Courses – Asterisk (*) indicates required program courses	AGEC course?	Terms	Credits
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Second Semester: Spring

EMS240 *		F, SP	6
EMS241*		F, SP	6
HES 128*		F, SP	3

Courses – Asterisk (*) indicates required program courses	AGEC course?	Terms	Credits
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Summer term:

EMS242*		SP, SU	6
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Courses – Asterisk (*) indicates required program courses	AGEC course?	Terms	Credits
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Third Semester: Fall

EMS243*		F, SP	6
EMS244*		F, SU	8

Courses – Asterisk (*) indicates required program courses	AGEC course?	Terms	Credits
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Fourth Semester: Spring

CIS 110	Yes	F, SP, SU	3
ENG 136		F, SP	3
SOC 140	Yes	F, SP	3
COM 121		F, SP	3

Key:

SP= Spring

F= Fall

SU= Summer

1. Aesthetic Sensibilities: An awareness of creative expression in the world around us.
2. Communication Skills: The ability to effectively convey meaning through various media on both personal and professional levels.
3. Critical Thinking Skills and Problem-Solving: The ability to analyze data and arrive at logical and defensible conclusions.
4. Cultural Diversity and Global Awareness: An appreciation of relationships and differences in values, customs, and norms of diverse global communities.
5. Techniques of Inquiry: Use of standardized methodological framework to collect, analyze, interpret, and present findings.
6. Technological Competency: A proficiency in evolving technology to compete and flourish in society.

Total credits**60**

Optional Courses:**Special Requirements for the AAS General Education Credits:**

Choose MEA 100 for Critical Thinking and Reasoning section Credits: (3)

Elective Options: 13-15

Choose at least 13 elective credits from the following, excluding courses already taken for the AAS General Education Core.

- BIO 100 -OR- BIO 181
- HES 128
- HES 113 and HES 129 -OR-
- BIO 201 and BIO 202

Paramedic Certificate and AAS Program Goal Map

I = Introduced

R = Reinforced

M = Mastery demonstrated

A = Assessed for Mastery

Courses and Experiences	Program Goals						
	<i>Graduates will demonstrate consistent honesty, be able to be trusted with property and confidential information, complete and accurately document patient care and learning activities. (1, 2, 4, 5, 6)</i>	<i>Graduates will demonstrate compassion toward others, responding appropriately to emotional responses, and demonstrate respect to others, being supportive and reassuring. (1, 2, 4)</i>	<i>Graduates will demonstrate self-confidence and self-motivation while performing skills at an entry level capacity. (1, 2, 3, 4)</i>	<i>Graduates will operate within the paramedic scope of practice demonstrating patient advocacy, careful delivery of service, and professional appearance. (1, 2, 3, 4, 5, 6)</i>	<i>Graduates will communicate utilizing communication and interpersonal relationship skills with patients and other members of the healthcare team. (1, 2, 4)</i>	<i>Graduates will manage the use of time and other resources to complete tasks and attain goals. (2, 5, 6)</i>	<i>Graduates will demonstrate, at all times, a safe, efficient environment that promotes team work to complete tasks. (2, 3, 4, 6)</i>
EMS 240	I	I	I	I	I	I	I
EMS 241	R	R	R	R	R	R	R
EMS 242	R	R	R	R	R	R	R
EMS 243	R	R	R	R	R	R	R
EMS 244	M, A	M, A	M, A	M, A	M, A	M, A	M, A

EMS

Paramedic

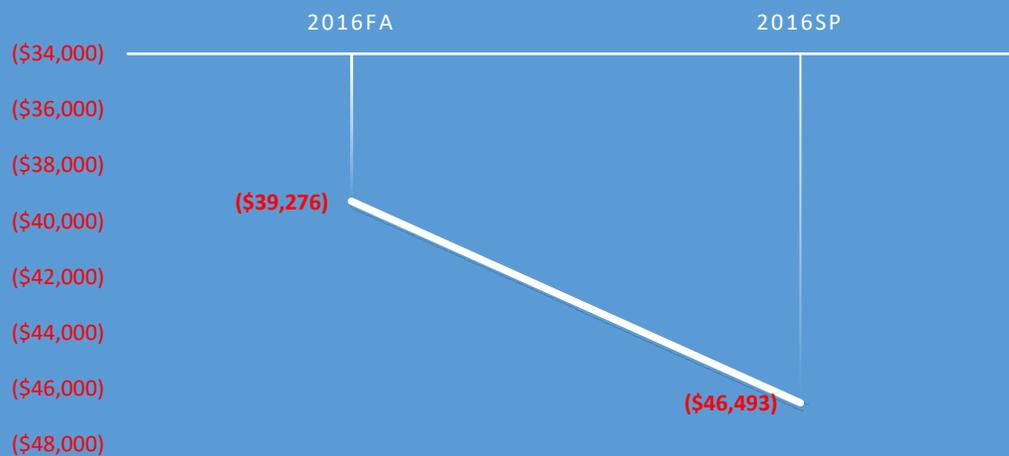
COUNTS	2016FA	2016SP	2016 FA&SP
Program (Prefix)	EMS	EMS	EMS
Number of Sections	3	5	8
Unduplicated Student Head Count	56	35	90
Duplicated Head Count (Enrollment)	56	46	102
Credit Hours	448	322	770
REVENUE SOURCES	2016FA	2016SP	2016 FA&SP
Tuition	\$49,572	\$28,026	\$77,598
Course Fees	\$9,520	13,045	22,565
Instructional Income	\$59,092	\$41,071	\$100,163
State Allocation pro-rated by credit hours	\$10,116	\$8,365	\$18,481
Revenues	\$69,208	\$49,436	\$118,644
EXPENSES	2016FA	2016SP	2016 FA&SP
Expenses	\$108,484	\$95,929	\$204,413
Net (Revenues less Expenses)	(\$39,276)	(\$46,493)	(\$85,769)
RATIOS	2016FA	2016SP	2016 FA&SP
State Allocation as a % of Revenue	15%	17%	16%
Net per Student	(\$701)	(\$1,011)	(\$841)
Net per Hour	(\$88)	(\$144)	(\$111)
Net per Section	(\$13,092)	(\$9,299)	(\$10,721)
Expense to Income Ratio	1.57	1.94	1.72
Income to Expense Ratio	0.64	0.52	0.58
Profit Margin	-56.8%	-94.0%	-72.3%
Cost per credit hour	\$242.15	\$297.92	\$265.47
Revenue per credit hour	\$154.48	\$153.53	\$154.08
Tuition only per credit hour	\$111	\$87	\$101
Instructional income per credit hour	\$132	\$128	\$130
Hours per student	8.0	9.2	8.6
Average number of students per section	18.7	9.2	12.8
Breakeven Hours	702.2	624.8	1,326.6
Breakeven Headcount	87.8	67.9	155.1
Percent Student Success (A, B, C, S)	94.6%	91.3%	92.97%
Course Fees as Percentage of Total Revenue	13.8%	26.4%	19.0%
Course Fees as Percentage of Tuition Only	19.2%	46.5%	29.1%
Net Income Less Course Fees	(\$48,796)	(\$59,538)	(\$108,334)

Paramedic

REVENUES AND EXPENSES

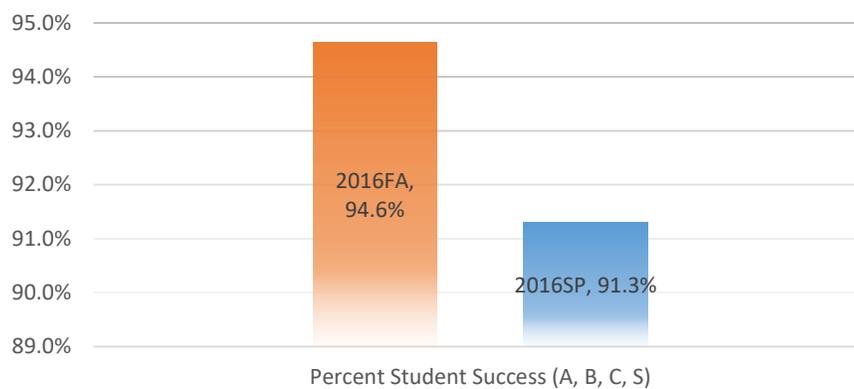


NET (REVENUES LESS EXPENSES)



Success = A, B, C, S Paramedic

STUDENT SUCCESS RATE



■ 2016FA ■ 2016SP

Program: Paramedic		2016-17	2017-18	2018-19	2019-20	AGEC A, B	AGEC A, B, S	Program review
Aesthetic Sensibilities	An appreciation of creative expression in the world around us.		HUM 250					
Communication Skills	The ability to effectively convey meaning through various media on both personal and profession levels	CIS 110 ENG 101 HIS 131 BIO 100						WAC to be assessed each time WAC course is offered. Collect data internally to report on in next Program review. EMS WAC identified course: EMS 222
Critical Thinking Skills and Problem Solving	The ability to analyze data and arrive at logical and defensible conclusions.		BIO 100,	EMS 241	POS 120	3.1. Presents accurate calculations and symbolic operations, and explain how such calculations and operations are used in either his or her specific field of study or in interpreting social and economic trends.		
				POS 120,	CHM 130	3.2. Illustrates core concepts of the field while executing analytical, practical, or creative tasks.		
					EMS 244			
Cultural Diversity and Global Awareness	An appreciation of relationships and differences in values, customs, and norms of diverse global communities.		SOC 131					
Techniques of Inquiry	Use of standardized methodological framework to collect, analyze, interpret, and present findings.	EMS 240 Spring to Fall Cycle	ENG 101	ENG 102		5.5. Assemble evidence relevant to characteristic problems in the field, describes the significance of the evidence, and uses the evidence in analysis of these problems.		
Technological Literacy	A proficiency in evolving technology to compete and flourish in society.		CIS 110					

Program: Paramedic		2018-19	2019-20	2020-21	2021-22	Gen Ed Specific Obj.	Program review
Aesthetic Sensibilities	An appreciation of creative expression in the world around us.						AGEC A, B
Communication Skills	The ability to effectively convey meaning through various media on both personal and profession levels		EMS 244 Summer to fall			2.4 Describes in writing at least one substantial case in which knowledge and skills acquired in academic settings are applied to challenge a non-academic setting; evaluates, using evidence and examples, the learning gained from the application; applies that learning to the question; and analyzes at least one significant concept or method related to his or her course of study in light of the learning outside the classroom.	<p>WAC to be assessed each time WAC course is offered. Collect data internally to report on in next Program review.</p> <p>EMS WAC identified course: EMS 244</p>
Critical Thinking Skills and Problem Solving	The ability to analyze data and arrive at logical and defensible conclusions.	EMS 242 spring to summer				3.4. Apply critical thinking skills to solve problems using inductive and deductive reasoning	
Cultural Diversity and Global Awareness	An appreciation of relationships and differences in values, customs, and norms of diverse global communities.						
Techniques of Inquiry	Use of standardized methodological framework to collect, analyze, interpret, and present findings.			EMS 243 Spring to fall		5.5 Assemble evidence relevant to characteristic problems in the field, describes the significance of the evidence, and uses the evidence in analysis of these problems.	
Technological Literacy	A proficiency in evolving technology to compete and flourish in society.						