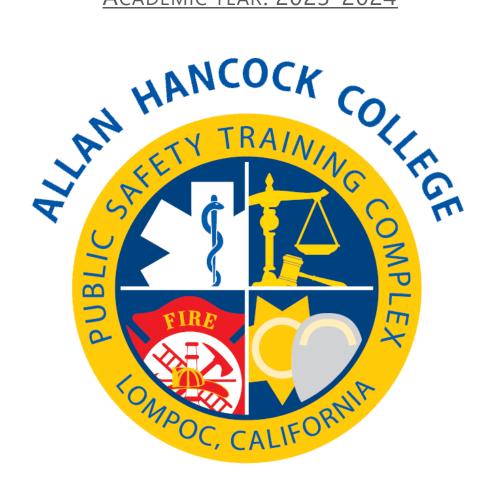
EMERGENCY MEDICAL SERVICES

ANNUAL PROGRAM REVIEW

ACADEMIC YEAR: 2023-2024



FIRE, SAFETY AND EMERGENCY MEDICAL SERVICES

TABLE OF CONTENTS

| YEARLY PLANNING DISCUSSION | 3 |
|---|----|
| GENERAL QUESTIONS | 3 |
| LEARNING OUTCOMES ASSESSMENT | 4 |
| DISTANCE EDUCATION (DE) | 5 |
| CTE TWO-YEAR REVIEW OF LABOR MARKET DATA AND PRE-REQUISITE REVIEW | 6 |
| NEW PROGRAM PLANNING INITIATIVES | 8 |
| AREA OF FOCUS: CURRICULUM AND TEACHING DESIGN | 9 |
| Curriculum and Teaching Design | |
| Validation for Program Planning Process – | 13 |
| NEW PROGRAM PLANNING INITIATIVE | 15 |

Yearly Planning Discussion

PROGRAM NAME: EMERGENCY MEDICAL SERVICES

ACADEMIC YEAR: 2023-2024

General Questions

1. Has your program mission or primary function changed in the last year?

No; this year's program is the first program to be held at AHC, the mission and primary function did not exist last year.

2. Were there any noteworthy changes to the program over the past year? (eg, new courses, degrees, certificates, articulation agreements)

A new two-unit course - EMS 199 - has been created in order to increase the overall in-class time, which will allow for better student learning.

A plan to create an associate's degree in paramedicine is currently being discussed, which will allow the program to be more competitive with other paramedic program. An associate's degree will also better prepare the students for their upcoming careers as paramedics, and set them up to obtain a bachelor's degree.

3. Is your two-year program map in place and were there any challenges maintaining the planned schedule?

As the paramedic training program is a one-year program, and this has been the first year of running it, there is not yet a two-year program map in place. A plan has been made to create a two-year program that will award successful students with an associate's degree in paramedicine. The major challenge in maintaining the one-year program has been the result of field internship sites not having enough availability for our students.

4. Were there any staffing changes?

Eleven instructional aids were hired in the early stages of the program. Thirteen part-time faculty members were hired with some overlap with the instructional aids.

A new program coordinator was also hired, but he is expected to start working in mid-August.

5. What were your program successes in your area of focus last year?

Despite many unforeseen and last-minute obstacles, the program was overall very successful; all eleven students are currently in the final stages of their training, and are all expected to graduate and receive a certificate of completion.

Learning Outcomes Assessment

a. Please summarize key results from this year's assessment.

The key results focus on student academic success throughout the program:

- All eleven students successfully completed the didactic portion of the program.
- All eleven students successfully completed their in-hospital clinical training.
- All elven students are expected to complete their field internship, and graduate from the program.
- Students were able to demonstrate strong understanding of material taught in class, both through written exams, and through practical skill exams.

One major challenge is having enough instructional aids and PTF who are willing to come for skill sessions, as most of the IA's believe they are not being compensated enough..

b. Please summarize your reflections, analysis, and interpretation of the learning outcome assessment and data.

Since this is the very first paramedic program at AHC, and the program is still underway, learning outcome assessment data is limited. However, so far students have demonstrated strong comprehension of the material and the ability to apply it as competent paramedics at the level where they are currently at. All students passed the didactic portion with a grade of C or greater, as well as clinical training, and currently there are no problems with students at their field internship sites.

c. Please summarize recommendations and/or accolades that were made within the program/department.

Recommendations are detailed under Curriculum and Teaching Design. The key takeaways focus on increasing in-class time which was achieved by adding two extra units to the program, assigning one faculty member to do the majority of the lectures, create documentation guides for students as well as hospital and field preceptors, and revise the class schedule.

One major challenge has been having enough instructional aids that are willing to come for skills sessions. Despite having eleven IA's, it has been a challenge actually bringing them in to work. The source of this problem sits with the pay for IA's; it is common for instructional aids in paramedic schools to have full time jobs, and the ones who work for AHC are no different. Many of them work for fire departments. IA's feel like the time they need to spend coming in, including commuting from remote areas, is not worth their time time. One instructional aid who is a full time firefighter specifically said, when discussing the low pay that keeping him from coming to work: "I have to think about my family". Increasing the pay for instructional aids will likely solve this problem. IA's are crucial for the paramedic training, as there must be at least one IA for every six students during skills sessions..

d. Please review and attach any <u>changes</u> to planning documentation, including PLO rubrics, associations, and cycles planning.

Courses related to certifications such as EMS 301 (EMS Academy, EMT-1 Basic) are guided by the governing body of accreditation (COAEMSP) using the guidelines of Title 22. Compliance to National, state and county standards is mandated to maintain the programs accreditation. After the first cohort completion of our paramedic academy, the PLO's will be reevaluated in both content knowledge and general abilities, such as critical thinking.

Distance Education (DE)

Modality Course Design Peer Review Update (Please attach documentation extracted from the Rubric for Assessing Regular and Substantive Interaction in Distance Education Courses)

a. Which courses were reviewed for regular and substantive interactions (RSI)?

Currently, there are no DE courses in the paramedic program. There are plans to create some DE program in the future, but currently the focus is on improving the program at its current format.

b. What were some key findings regarding RSI?

N/A

c. What is the plan for improvement?

Plans for creating DE courses for the paramedic program will be developed in the future, potentially at the end of the upcoming class of Fall 2024. These DE courses will be advanced material that is not normally a part of paramedic training, which will be a part of the effort of creating an Associate's degree in paramedicine.

CTE two-year review of labor market data and pre-requisite review

a. Does the program meet documented labor market demand?

.There is an ongoing shortage in paramedics nation-wide, California, and specifically in Santa Barbara County. According to the U.S. Bureau of Labor Statistics, Employment Projections program. "Overall employment of EMTs and paramedics is projected to grow 7 percent from 2021 to 2031, about as fast as the average for all occupations. About 20,000 openings for EMTs and paramedics are projected each year, on average, over the decade." The paramedic program at AHC meets labor market demands by training students to become proficient and competent paramedics that are expected to be integrated into the field of Emergency Medical Services, thereby meeting the labor market demands.

b. How does the program address needs that are not met by similar programs?

Many paramedic programs in the nation and in California specifically take two years to complete. At AHC, the paramedic program is run in an intensive one-year format, which allows for double the amount of students to graduate and enter the labor market in comparison to many other programs.

The AHC paramedic program has a unique, state of the art training facility that enables student to be much more thoroughly prepared for their jobs as paramedic. This includes several working and fully-stocked ambulances which allows even the students that have never been in an ambulance to be well prepared to working in them; over 1.3 mile of working roads to drive emergency vehicles on; an entire scenario village where high fidelity and realistic simulations can be made. These examples of the unique training environment of the AHC Paramedic Program serve to prepare the paramedic students for the job market at the highest levels possible.

c. Does the employment, completion, and success data of students indicate program effectiveness and vitality? Please, explain.

Since this paramedic program is the first one to be held and is still in progress, employment and completion data does not yet exist. However, all students are expected to successfully complete the training program. With the constant shortage of paramedics throughout Santa Barbara County and California, and with students eagerness to work as paramedics, students are expected to be integrated to the job market successfully.

d. Has the program met the Title 5 requirements to review course prerequisites, and advisories within the prescribed cycle of every 2 year for CTE programs and every 5 years for all others?

This paramedic program is the first one to be held at AHC and the 2 year cycle has not yet ended, and thus this is not applicable.

e. Have recommendations from the previous report been addressed?

Being the first paramedic program to be held at AHC, there are no previous reports to be addressed.

New Program Planning Initiatives

Use the tables below to fill in **NEW** resources and planning initiatives that do not apply directly to core topics. *This section is only used if there are new planning initiatives and resources requested.*

| New Program Planning Initiative | | |
|---------------------------------|---|--|
| Title: | Paramedic Program: Skill lab equipment and supplies | |
| Planning | 1-2 years | |
| years: | | |

Description:

Obtaining equipment required by Paramedics that are essential for the skills that will be required to learn during the program (Clinicals and the Capstone Internship) and utilize upon graduation once they enter the field of Paramedicine

Resources:

Priority Level: Medium **Resource Type:** Technology

Quantity: 1

Per Item Price: Approx. \$130,000

Description: Immersive simulation room, where different environment can be created to allow

for high fidelity simulations.

https://echo.healthcare/immersive-interactive/

Area of Focus: Curriculum and Teaching Design

<u>Curriculum and Teaching Design</u> analyzes currency of modalities, articulation, and industry needs. It includes content review, currency and relevance, accessibility, and equitable practices.

1. What data were analyzed and what were the main conclusions?

This report encompasses the first and only paramedic program (Fall 2023), data gathering is limited as the program is still in progress. Data collected at this point is limited to the number of students who registered and are currently still enrolled in the program; student academic performance as measured by test scores and reviews from various preceptors; trends are not applicable at this time.

At this point, data collected is done by observing the current class and consists of: demographics; test scores; instructors and support staff feedback; clinical preceptors feedback; field internship preceptors feedback.

The main conclusions:

- There should be one main lecturer designated to teach the majority of the lectures, with
 occasional guest lecturers to provide supplemental lectures on specific topics such as
 pediatrics, obstetrics, cardiology. Having one main lecturer will ensure that material is
 being taught in uniformity and consistency, which will help with student learning
- Better consistency with following through with existing schedule is needed, to avoid mistakes such as teaching a topic multiple times which happened more than once
- Documentation during the clinical period needs improvement: preceptor must sign off each day, student completing the FISDAP documentation within 24 hours, staff assigned to that student reading all documentation and submitting their documentation on the set time schedule.
- Communicate with local and neighboring EMS systems in advance to allow for smoother transition into field internship (establish additional backup training sites)
- The diversity (in term of ethnicity and gender) of the program must be assessed, as current numbers do not represent the diversity of Allan Hancock College and its students.

2. Based on the data analysis and looking through a lens of equity, what do you perceive as *challenges* with student success or access in your area of focus?

As this is the first paramedic program at AHC, data for analysing challenges with student success and access is limited. Challenges observed regarding these areas in the current paramedic program include:

- Lack of class-time hours
- Days dedicated to lectures only are cumbersome and tiring
- Not enough instructional aides who are willing to work half-days (1400-1800) for skills sessions
- Lecturers assigned to teach too close to the class they need to teach without knowing
 what was already taught, causing inconsistent teaching. For example: a topic being taught
 multiple times, while topics that were supposed to be taught were not covered at all.
 Clinical documentation both for students and emergency departments preceptors can be
 better
- Limited number of field internship sites and preceptors leading to delay in course progression
- Some of the existing technology, such as lab and ambulance cameras, not being utilized, and the teaching potential is not used to its fullest extent; students are not able to watch themselves at the end of skills and scenarios

One of the newest challenges is the shift in the gender in our program. EMS 102 has close to a 50/50 male / female ratio. (Please, note gender identity has not been analyzed thoroughly—hopefully addressed in future questionnaires). We have seen a significant increase of males vs. females in EMS 301: EMT Basic Academy. In the current paramedic class, there are ten males and only one female. Based on the data from the Lightcast Report of EMTs and Paramedics in Santa Barbara and San Luis Obispo Counties, males represent 68%, while only 32% are female.

The Fire Service has dealt with this gender discrepancy for decades. Our local Fire Service leaders are aware of this discrepancy; it's a matter of working together to recruit more females early. A large proportion of our accepted EMT Academy students are pursuing a career in fire. With such few females going into the fire service, that could be a factor in our low numbers in our EMT Basic Academy. The skills firefighters must possess have expanded immensely, especially in medical care. Since the majority of 911 calls are for medical emergencies, EMT-B certification has become mandatory for municipals departments, and many are moving towards paramedic certification to be the gold standard. We need to encourage, provide access, and support women in this field. This is no longer a career that only requires brute, physical strength. We need to include women in the narrative early. Women in the field are highly sought after and positions in our community want to hire a diverse crew that represents the constituents of our community; however, the number of qualified diverse applicants remains extremely low.

3. What are your plans for change or innovation?

Plans for change and innovation are focused on student success, and include:

- Increasing the number of in-class days from three days per week, 0900-1800 to four days per week, 0900-1800; Alternatively, the didactic portion of the program can be extended while maintaining the same number of classes per week. This will allow students to maintain their jobs outside of the program while still increasing the total class time.
- Split class days to lecture (0900-1300) and skills session (1400-1800) for some of the class days, to make lectures easier for students to follow and learn
- Create a job posting for instructional aids; advertise said job posting at local and neighboring EMS agencies, including but not limited to: AMR, SBCFD, San Luis Ambulance, CALSTAR, Atascadero Fire, SLO Fire
- Increase hourly pay of instructional aids in better incentivize employees to work half-days
- Assign a single lecturer to teach most if not all lectures (with a backup lecturer assigned to
 each day). Assign specialist lecturers to teach supplemental topics that are either more
 challenging and important (such as cardiology, neurology [Look for ED Physicians]) or are
 seen with fewer frequency in the field of EMS (such as obstetrics and pediatrics [Suz is an
 expert]).
- Create a new schedule and assign lecturers and backup lecturers to each day. A
 supplemental schedule will include specific learning objectives for each lecture as well as
 each lab session and the required equipment for each lab such that preparation for labs
 will be made easy for both instructors and instructional aids.
- Create a student-guide for documentation during clinical training and field internship, and ensure student understanding with a documentation exam prior to the clinical phase
- Create a preceptor-guide for documentation during clinical training, which will be found in clinical sites for ED nurses' convenience. Include a form that is an attestation that the preceptor has reviewed with their signature.
- Communicate with local and neighboring EMS agencies well before field internship begins
 to secure field internship sites for students. These agencies include: Santa Barbara AMR,
 Santa Barbara County Fire Department, San Luis Ambulance, Ventura County AMR,
 Ventura County Fire Department
- Teach instructional aids the use of our existing technology, and create manuals for all the equipment. This equipment includes: high fidelity manikins, simulated monitors, cameras and recording devices, ambulance in EMS lab, and more.

4. How will you measure the results of your plans to determine if they are successful?

Results of plans for change and innovation will be measured both quantitatively and qualitatively. These results are limited by the fact that only one paramedic program has been taught, therefor trends of improvement will be practically nonexistent.

- Students' grades will be evaluated as an objective measurement of their success
- Students will fill out surveys during the half-point and the end of didactic, the end of clinical training, and at the half-point and the end of clinical internship. These surveys will cover the topics of:
 - Student success in written and skills testing
 - Student satisfaction with lecturers as well as skills instructors
 - Student satisfaction with facilities and equipment
 - o Student confidence and readiness for the next phase of their training
 - Student success in application of skills on real patients
 - Student satisfaction with ED nurses as preceptors
 - Student satisfaction with field internship sites and preceptors
 - o Student confidence and readiness for being a certified paramedic
- Surveys will be given to all IA's and faculty involved with the program at the end of each semester. These surveys will cover the topics of:
 - Student participation and engagement during lectures and skills sessions
 - Student success in applying lecture knowledge during skills sessions
 - Evaluation of facilities and equipment use
- Surveys will be given to ED nurses involved in clinical training. These surveys will cover the topics of:
 - Student success in performing skills on patients
 - Understanding of manuals provided by AHC Paramedic Program [manuals on how to evaluate paramedic students; also, the expectation from students in terms of paramedic scope of practice, what skills and medication administration are permitted]
 - Communication with AHC Paramedic Program Coordinator

- Surveys will be given to preceptors at field internship sites. These surveys will cover the topics of:
 - o Overall readiness of students for the internship phase of the program
 - Student's success as a competent paramedic intern
 - Understanding of manuals provided by AHC Paramedic Program [manuals on expectation during the different phases of internship, documentation expectation from student and preceptor]
 - Communication with AHC Paramedic Program Coordinator
- 5. What practices are used in your program's DE courses that support or demonstrate regular and substantive interaction?

Currently, there are no DE courses as part of the paramedic program.

However, DE courses may be offered in the future as extra curriculum courses to support the growth of the paramedic program, and the possible establishment of an AS Degree in Paramedicine. These would be advanced courses that can be taught online without requiring any lab time, such as Advanced EKG Interpretation, Advanced Pharmacology, EMS Research, and Advanced Anatomy and Physiology for Prehospital Providers

Validation for Program Planning Process

If you have chosen to do the Validation this year, please explain your process and the findings.

 Who have you identified to validate your findings? (Could include Guided Pathway Success Teams, Advisory Committee Members, related faculty, industry partners or higher education partners)

As the AHC Paramedic Program is in its infancy, validation must be done with great scrutiny to ensure that the program meets its goals and continues to improve. The findings of this year's Program Update will be validated by the Allan Hancock EMS Advisory Committee, which is comprised of:

Chair, Suz Roehl, Allan Hancock College

- Richard Alegre, Medical Doctor
- John Cecena, Faculty, Allan Hancock College
- Nick Clay, Santa Barbara County LEMSA
- Brad Dandridge, Santa Maria City Fire Department
- Helen Faithfull, American Medical Response
- Brian Fallon, Lompoc City Fire
- Jason Levy, Santa Barbara County EMSA
- Christine Sewell, Marian Regional Medical Center
- Dr. Daniel Shepherd, Santa Barbara County Emergency Services Agency
- Jennie Simon, Santa Barbara City Fire
- Jean Steel, Public Member
- Ryan Stevens, Lompoc Valley Medical Center
- Sebastian Wong, Allan Hancock College

In addition to the Advisory Committee, staff from the paramedic program will be a part of the evaluation process. Members include: Sabrina Habre, Uri Pollack, and other instructional aids and part time faculty

2. Are there specific recommendations regarding the core topic responses from the validation team?

N/A

New Program Planning Initiative

Based on the narratives for the prompts above, what are some program planning initiatives and resources needed for the upcoming years? *This section is only used if there are new planning initiatives and resources requested.*

| New Program Planning Initiative (Objective) – Core Topic Only | |
|---|---------------------|
| Title (including number: | Class Time Increase |
| Planning years: | 2024-2025 |
| | |

Description:

Currently, the paramedic program' didactic stage has three class-days per week and lasts 16 weeks. Students ability to comprehend materials in lectures is not fulfilled to its fullest potential as there is not enough time to adequately cover each topic. In addition, lecturers report of inability to cover all the required materials, leaving students having to do more at-home studying. To address this issue, an additional full day of instruction is required. Alternatively, the didactic portion of the paramedic class can be extended accordingly to 22 weeks instead of 16.

What college plans are associated with this Objective? (Please select from the list below):

Ed Master Plan Student Equity Plan Guided Pathways AB 705

Technology Plan Facilities Plan Strong Workforce Equal Employment Opp.

Title V

| New Program Planning Initiative (Objective) – Core Topic Only | |
|---|---|
| Title (including number: | Instructional-Aid Job Posting Formation |
| Planning years: | 2024 |
| | |

Description:

Currently, there are not enough instructional aids (IA) to be a part of skills sessions. Instructional aids are part-time employees who generally have full time jobs in EMS and fire departments. In addition, the idea is that the next paramedic class days will be divided into half-day lecture and half-day skills. (This is likely not going to be implemented in the upcoming class) Therefor it is difficult to have IA's commit to teach skills, and their schedules may change last-minute. Creating a job posting for more IA's as well as advertising using flyers at local EMS agencies will help increase the number of IA's, and will help ensure full staffing for each skills session.

What college plans are associated with this Objective? (Please select from the list below):

| Ed Master Plan | Student Equity Plan | Guided Pathways | AB 705/1705 |
|-----------------|---------------------|------------------------|-----------------------|
| Technology Plan | Facilities Plan | Strong Workforce | Equal Employment Opp. |
| Title V | | | |

| New Program Planning Initiative (Objective) – Core Topic Only | | |
|---|--------------------------------|--|
| Title (including number: | Increase Instructional Aid Pay | |
| Planning years: | 2024-2026 | |
| | | |

Description:

Instructional aids (IA) are part time employees, who generally have full-time jobs in EMS and fire departments, who assist in skills sessions of the paramedic program. Currently, the IA pay is not enough to incentivize such employees to come in to work, and will be even less incentivizing if skills sessions will be only half-days. This is evident by what many IA's say; one IA who is a Santa Barbara County Fire Department employee specifically said, when asked to come and teach skills, "I have to think of my family first", indicating that the pay is not worth their time. A pay increase for all IA's will help incentivize them to come and work, so that there is enough staff for skills sessions.

What college plans are associated with this Objective? (Please select from the list below):

Ed Master Plan Student Equity Plan Guided Pathways AB 705/1705

Technology Plan Facilities Plan Strong Workforce Equal Employment Opp.

Title V

| Program Review Signature Page: | |
|--|------------|
| Uri Pollack | 05/31/2024 |
| Program Review Lead | Date |
| infitely M = Cann | |
| Program Dean | Date |
| Robert Curry Robert Curry (Jun 10, 2024 15:43 PDT) | |
| Vice President, Academic Affairs | Date |

2023-2024 Paramedic Program Review Curriculum Design S2024

Final Audit Report 2024-06-10

Created: 2024-06-06

By: Danielle Rivera (danielle.rivera@hancockcollege.edu)

Status: Signed

Transaction ID: CBJCHBCAABAAFtG3QF_WnXtlWEHDRLMM32zSrVjTvefL

"2023-2024 Paramedic Program Review Curriculum Design S20 24" History

- Document created by Danielle Rivera (danielle.rivera@hancockcollege.edu) 2024-06-06 6:27:32 PM GMT- IP address: 209.129.94.61
- Document emailed to Mitch McCann (mitch.mccann@hancockcollege.edu) for signature 2024-06-06 6:28:08 PM GMT
- Email viewed by Mitch McCann (mitch.mccann@hancockcollege.edu) 2024-06-06 8:02:24 PM GMT- IP address: 104.47.55.126
- Document e-signed by Mitch McCann (mitch.mccann@hancockcollege.edu)

 Signature Date: 2024-06-06 8:02:47 PM GMT Time Source: server- IP address: 209.129.94.61
- Document emailed to Robert Curry (rcurry@hancockcollege.edu) for signature 2024-06-06 8:02:48 PM GMT
- Email viewed by Robert Curry (rcurry@hancockcollege.edu) 2024-06-06 8:34:44 PM GMT- IP address: 104.47.70.126
- Document e-signed by Robert Curry (rcurry@hancockcollege.edu.arc)

 Signature Date: 2024-06-10 10:43:28 PM GMT Time Source: server- IP address: 209.129.94.61
- Agreement completed. 2024-06-10 - 10:43:28 PM GMT