**Sinclair Community College**

**Continuous Improvement Annual Update 2013-14**

**Please submit to your dean and the Provost’s Office no later than Oct. 1, 2013**

**Department:** 0666 – Emergency Medical Services

Year of Last Program Review: FY 2008-2009

Year of Next Program Review: FY 2015-2016

**Section I: Department Trend Data, Interpretation, and Analysis**

**Degree and Certificate Completion Trend Data – OVERALL SUMMARY**

Figure 1: Original Degree and Certificate Completion Trend Data

Please provide an interpretation and analysis of the Degree and Certificate Completion Trend Data (Raw Data is located in Appendix A*): i.e. What trends do you see in the above data? Are there internal or external factors that account for these trends? What are the implications for the department? What actions have the department taken that have influenced these trends? What strategies will the department implement as a result of this data?*

The interpretation of the above data is problematic. This data reveals an extreme downward success rate over the past 6 years. The data is flawed. The slope of change is too pronounced. I believe the reason for the flawed data is that in 2007, the college retrospectively determined students who had completed certificates, but were not reported to the state. These past graduates were then reported during that FY, therefore artificially increasing the certificate completion rate for 2007.

Using the following sources, I recalculated the department’s success rate.

* Dawn reports for degree completion.
* EMS department database. The EMS department is required by state accreditation to track all licensure level students who are eligible for state testing and eventual practice.
	+ EMT-Basic (EMS 117/118) and Paramedic (EMS 135-139).
	+ EMT (EMS 1150/1155) and Paramedic (EMS 2100-2205).
* See amended Appendix A (now called Table 1).
* Updated success rates are now displayed in Figure 2.
* The paramedic program has historically had 2 entry points: Fall and Spring. When planning for semester conversion, it was decided to have the final quarter based paramedic program enter in Fall 2011; therefore finish in Fall 2012.
	+ No paramedic cohort was started in Spring of 2012. This resulted in a no graduates in Spring 2013; therefore an overall decrease in success rate for 2012-2013.
* To understand the success rate, it is important to compare this data with enrollment trends for the department. Please see Figure 3.

**Table 1– Program Completion and Success Rate Data**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Department | Program | FY 07-08 | FY 08-09 | FY 09-10 | FY 10-11 | FY 11 - 12 | FY 12-13 |
| 0666 | EBST.STC | 291 | 239 | 225 | 161 | 108 | 90 |
| EMT Basic Accreditation Data: Number of successful students | 186 | 261 | 258 | 164 | 116 | 97 |
| 0666 | EMSFO.AAS |  | 0 | 5 | 5 | 7 | 2 |
| 0666 | EMSFO.S.AAS |  |  |  |  |  | 4 |
| 0666 | EMSVS.AAS |  | 1 | 1 | 3 | 1 | 1 |
| 0666 | EMSVS.S.AAS |  |  |  |  |  | 0 |
| 0666 | EPST.STC / EPST.CRT | 132 | 109 | 85 | 59 | 83 | 55 |
| EMT Paramedic Accreditation Data: Number of successful students | 76 | 108 | 88 | 81 | 92 | 58 |
| GRAND TOTALS | 262 | 370 | 352 | 253 | 216 | 162 |
| Percentage of Success Derived from Certificates | 100% | 99.7% | 98.3% | 96.8% | 96.3% | 95.7% |

*Table 1 Notes:*

* *Data updated on 10/28/13*
* *Data from Dawn Degree Completion Five Year Trend Report and from EMS department pass rate database.*
* *Grand Totals are the sum of highlighted areas only.*
* *EMS degrees became available in Fall 2008.*
* *Semester version of EMS degrees became available in Fall 2012.*

Figure 2: EMS Department Recalculated Degree and Certificate Completion Trend Data

*Figure 2 Notes:*

* *Data updated on 10/28/13*
* *Data from Table 1 , Grand Totals*

**Department FTE Trends**

* FTEs for all quarter based fiscal years have been converted to semester equivalents.
	+ $(Quarter FTE-\left(Quarter FTE\*0.33\right))=Semester Equivalent FTE$
* Years 2008 through 2011 demonstrated a significant increase in enrollment. This corresponded with the nationwide recession. These years now have an effect on the curve of enrollment over the past decade.
* The paramedic program has historically had 2 entry points: Fall and Spring. When planning for semester conversion, it was decided to have the final quarter based paramedic program occur in Fall 2012.
	+ This resulted in a decrease in student load for Spring 2012, therefore an overall decrease in FTE in 2011-2012.
* Non-certificate generating courses continues to be a small portion of the department’s FTE, therefore its statistical power is limited. This portion has less than a 5% effect on FTE.
* A request has been sent to the Ohio Division of EMS to determine the number of EMT’s and Paramedic newly licensed on a year by year basis. This information will give me a better understanding of statewide trends related to the generation of EMS certified individuals. The data may show a statewide decrease in certification generation over the past year.
	+ Antidotal information from two other local programs has indicated a decrease in their enrollment.
	+ As of 10/31/13, the Ohio Division of EMS has not sent me the data.

Figure 3: EMS Department FTE Enrollment

Recession

Unemployment: > 8.5%

*Figure 3 Notes:*

* *Data updated on 10/28/13*
* *Data from RAR*

**Course Success Trend Data – OVERALL SUMMARY**

Please provide an interpretation and analysis of the Course Success Trend Data (Raw Data is located in Appendix A). Looking at the success rate data provided in the Appendix for each course, please discuss trends for high enrollment courses, courses used extensively by other departments, and courses where there have been substantial changes in success.

**EMT Program Enrollment / Pass Rate**

* There has been an increase in overall department success within FY 2012-2013. As part of a strategy to manage high attrition within the EMT program, required pass rates for the final exam as well as other administrative requirements have been softened. This has resulted in an increased number of successful students without a dramatic decrease in national testing pass rates (see Table 2).
	+ There appears to have been in increase in attrition that corresponded with the change in curriculum. The newest version of the EMT curriculum is more demanding than the version it replaced: increased complexity and breadth of information.

**Table 2– EMT Program Enrollment / Pass Rate**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **EMT-Basic / EMT** | **Subsidy Enrollment** | **Course Completion** | **Attrition Rate** | **Fire Time Pass Rate** | **Aggregate Pass Rate** | **Non-Testing Rate** |
| 2007-2008 | 333 | 186 | 44% | 87% | 95% | 11% |
| 2008-2009 | 471 | 261 | 45% | 83% | 92% | 11% |
| 2009-2010 | 476 | 258 | 46% | 74% | 84% | 16% |
| 2010-2011 | 432 | 164 | 62% | 84% | 89% | 11% |
| 2011-2012 | 289 | 116 | 60% | 94% | 96% | 8% |
| 2012-2013 | 196 | 97 | 51% | 81% | 87% | 13% |
| **Totals** | **2197** | **1082** | **51%** | **83%** | **90%** | **12%** |

*Table 2 Notes:*

* *Data updated on 10/28/13*
* *Data from EMS department pass rate database.*
* *Gray area indicates implementation of newest EMT curriculum*

Please provide any additional data and analysis that illustrates what is going on in the department (examples might include accreditation data, program data, benchmark data from national exams, course sequence completion, retention, demographic data, data on placement of graduates, graduate survey data, etc.)

**EMS Degree Viability**

* EMS degree viability appears to be stable. For the latest reported Fall semesters, there have been approximately 200 students interested in pursuing the degree. Degree completion continues to be low with year to year numbers around 7 students. The fire science option continues to outpace the EMS only option.

**Table 3– EMS Degree Utilization**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Degree** | **08/FA** | **09/FA** | **10/FA** | **11/FA** | **12/FA** |
| EMSFO.AAS−Emergency Medical Services Fire Science Option − A | 50 | 117 | 127 | 138 | 63 |
| EMSFO.S.AAS−Emergency Medical Services Fire Science Option − A |  |  |  | 2 | 48 |
| EMSVS.AAS−Emergency Medical Services | 23 | 71 | 72 | 60 | 32 |
| EMSVS.S.AAS−Emergency Medical Services |  |  |  | 4 | 43 |
| **Totals** | **73** | **188** | **199** | **204** | **186** |

**EMS Degree Course Selection**

* A survey was constructed by the EMS department and delivered to all EMS degree graduates from 2008 to Spring of 2013. This totaled 29 graduates. Nine students completed the survey. This represents a 31% response rate.
* Respondents were asked to determine the value of each course they took within their degree. Table 4 reveals the results of those courses determined to be not valuable.
	+ The following courses (highlighted) have already been deleted from the degree: Humanities elective and allied health elective.
	+ The mathematics course is required by OBR rules. Students are now being advised to take MAT 1140 if they are planning to move to a 4 year school.
	+ The value of the physical education elective will be reviewed during the next program review.
	+ Communication and Psychology courses are required by OBR
		- Students already have an option of 2 communication courses.
		- Sociology can be considered as an alternative to psychology. This will be discussed during next program review.

**Table 4 – EMS Degree Courses Determined to be Not Valuable.**

|  |  |  |
| --- | --- | --- |
| **Course Name** | **Raw Number** | **Percentage of Respondents** |
| Mathematics | 5 | 56% |
| Physical Education Elective | 5 | 56% |
| Humanities Elective | 3 | 33% |
| Allied Health Elective | 3 | 33% |
| Communication Courses | 2 | 22% |
| Psychology | 2 | 22% |
| EMS Management 1 | 1 | 11% |
| Fire Investigations | 1 | 11% |
| Medical Terminology | 1 | 11% |
| Fire Safety Inspector | 1 | 11% |

**Paramedic Program Attrition Rates**

* Data provided examines enrollment at initial course and final course in a series. Initial cohort size is defined through a dawn report: This is 14th day enrollment. Course completion is defined as having eared an A, B or C in the course. Completion data obtained through EMS department national registry testing results database.
* At the paramedic level, students who fail a course within a series of courses are then moved into a new cohort when/if that student retakes a course.
* To comply with CoAEMSP (national accreditor of paramedic programs) attrition standards, effective Fall of 2012, all attrition is subcategorized by reason.
	+ Students who leave the program for financial, life, scheduling issues are categorized as non-academic attrition.
	+ Those who fail due to academic reasons are categorized as academic attrition.

**Table 5 – Paramedic Program Attrition Rates**

|  |  |  |  |
| --- | --- | --- | --- |
| **Paramedic****Starting Term** | **Subsidy Enrollment** | **In Cycle Course Completion Enrollment** | **Attrition Rate** |
| 2000-2001 | 110 | 54 | 51% |
| 2001-2002 | 126 | 76 | 40% |
| 2002-2003 | 109 | 73 | 33% |
| 2003-2004 | 134 | 87 | 35% |
| 2004-2005 | 132 | 74 | 44% |
| 2005-2006 | 141 | 61 | 57% |
| 2006-2007 | 139 | 76 | 45% |
| 2007-2008 | 155 | 108 | 30% |
| 2008-2009 | 157  | 88 | 44% |
| 2009-2010 | 158  | 81 | 49% |
| 2010-2011 | 149 | 93 | 38% |
| 2011-2012 | 73 (no Spring Cohort) | 57 | 22% |
| **Totals** | **1583** | **930 Average** | **41%** |

**Table 5a – Paramedic Program Attrition Rate with Subcategories**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Paramedic****Starting Term** | **Subsidy Enrollment** | **In Cycle Course Completion Enrollment** | **Educational Attrition** | **Non-Educational Attrition** |
| **Fall 2012** | **45**  | **30 (67%)** *estimated* | **8 (18%)** *estimated* | **7 (15%)** *estimated* |
| **Spring 2013** | **28** | **In progress** | **In progress** | **In progress** |
| **Fall 2013** | **50** | **In progress** | **In progress** | **In progress** |

Table 3 *Notes*

* *Last Updated: 10/28/2013. Assuming all 30 students within final semester of paramedic cohort pass during Fall 2013.*

**2013 Continuous Quality Improvement Results**

* CoAEMSP requires a program recourse survey every year. This survey is administered to the faculty, staff, students and advisory committee. The results are below. The survey gathers opinion based data on curriculum, faculty, financial support, all information delivery modes (lecture, laboratory, clinical, and field internship), medical direction, etc.
* Numbers beside comment areas indicate the number of comments related to this theme.
* This information is used to determine plans for program improvement.
	+ Students had frequent concerns regarding number of hours required for clinical / field internship. Though the department cannot decrease the required hours, we have executed the following changes to help diminish this concern.
		- Effective Spring 2014 cohort, during paramedic program orientation, a time management activity will be done by all students.
		- Paramedic student handbook will be updated to better communicate clinical / field internship hour requirements.
		- Effective Spring 2014, clinical / field internship courses will be run as flex courses, starting in the time between semesters. This will allow for at least 2 additional weeks to complete hour requirements.

*Threshold areas defined as:*

*1) Aggregate score below 3.0*

*2) Positive response rate (agree and strongly agree) below 70%*

*3) N/a response rate above 25%*

1. Faculty / Staff 2013:
	1. Trends
		1. 73% overall response rate (22 total surveys).
		2. Overall evaluation of program is 4.61 (out of 5)
		3. Statements beyond threshold
			1. Medical Director reviews and approves the progress of each student
			2. Financial aid meets the needs of the program
			3. Tutorial services meets the needs of the program
			4. Laboratory is accessible outside of regularly scheduled class
			5. Quiet study area is available for students
			6. Secure storage is available for students
			7. Hospital / field instructors are consistent in their evaluation
			8. Faculty are given funding to participate in continuing education
			9. Physician student interaction developed good communication
			10. Physician contact is sufficient to provide student with physician perspective
			11. Exposure to physicians is adequate
		4. Comment Themes (aggregated– comments from all sections of survey)
			1. High quality faculty / staff (8)
			2. Consistency is an issue (3)
			3. Need lab and clinical coordination (3)
2. Students 2013
	1. Trends
		1. 95% response rate (55/58)
		2. Overall evaluation was 4.09 (out of 5)
		3. Statements beyond threshold
			1. Faculty teach effectively in the hospital clinical area.
			2. Faculty teach effectively in the field internship clinical area.
			3. Faculty numbers are adequate in the field internship setting.
			4. Faculty ensure student representation on the program advisory committee.
			5. Tutors assist me as needed.
			6. The admissions personnel assist me as needed.
			7. The financial aid personnel assist me as needed.
			8. The academic advisors assist me as needed.
			9. The librarians assist me as needed.
			10. There are adequate financial support for special student instructional activities (e.g. field trips, meetings).
			11. Ancillary facilities provide adequate secure storage for student personal items.
			12. The hospital/field internship facilities offer an adequate number of procedures for the student to meet clinical objectives.
			13. Hospital/Field internship instructors are sufficiently knowledgeable to provide student instruction.
			14. There are sufficient numbers of instructors for the number of assigned students (clinical).
			15. Journals are adequate to support assignments.
		4. Comment Themes (aggregated – comments from all sections of survey)
			1. Positives
				1. Excellent curriculum / resources / teaching (34)
				2. Excellent Faculty (28)
				3. Excellent Medical Director teaching (11)
				4. Positive clinical experience (11)
				5. Physicians were willing to work with me in the clinical setting (3)
				6. Flipped classroom good (2)
				7. Tuition (1)
			2. Negatives
				1. Clinical requirements to high / stringent / inapplicable (14)
				2. Clinical faculty were poor / unclear (11)
				3. Flipped classroom bad (11)
				4. Lab access or equipment problems (8)
				5. OR access is difficult (4)
				6. Some content inapplicable (3)
				7. Staff / Faculty / Preceptors are substandard (3)
				8. No interaction with physicians in the clinical setting (3)
				9. Need more faculty in lab (2)
				10. Academic support services unacceptable (2)
				11. Difficult transition from quarter to semester (2)
				12. Little time for daily life (2)
				13. Did not appreciate needing to get internet access to take an in person class (1)
				14. Physicians think we are unfit to be in the clinical setting (1)
				15. Less Lecture / More Lab (1)
				16. Severely declined quality of program (1)
3. EMS Advisory Committee 2013
	1. Trends
		1. 62% response rate (13/21)
		2. Overall evaluation was 4.29 (out of 5)
		3. Statements beyond threshold
			1. Admissions personnel are adequate
			2. Tutoring services meet the need of the program
			3. Budget provides sufficient number of lab faculty
			4. Budget supplies sufficient field internship
			5. Budget provides adequate staff / faculty coned
			6. Secure storage
			7. Hospital/Field instructors are consistent in their evaluations
			8. Hospital/Field instructors are readily available.
			9. Faculty are given time to participate in coned
			10. Faculty are given funding to participate in coned
		4. Comment Themes (Aggregated – comments from all sections of survey)
			1. Excellent faculty / staff / equipment / resources (3)
			2. Program director is well respected (2)
			3. OR sites are limited (2)
			4. Dynamic program striving to improve (1)
			5. Excellent Medical Direction (1)
			6. Faculty within the clinical setting (1)
			7. Decreased budget for faculty continuing education (1)
			8. Supportive college administration (1)
			9. Increased children’s time / procedures (1)
			10. Preceptor inconsistency (1)

**Paramedic Program Pass Rates**

* Aggregate pass rates for the paramedic program historically been greater than 84% for the past 8 cohorts. The 9th cohort, Fall 2012 is the last group to complete the curriculum under quarters. This group still has approximately one year to complete all testing options.
* National comparable for 2012 is an aggregate pass rate of 86%.
* State accreditation minimum requirements are 80%. CoAEMSP minimums are 70%.

**Section II: Progress Since the Most Recent Review**

Below are the goals from Section IV part E of your last Program Review Self-Study. Describe progress or changes made toward meeting each goal over the last year.

|  |  |  |
| --- | --- | --- |
| **GOALS** | **Status** | **Progress or Rationale for No Longer Applicable** |
| Implement the new state curriculum when it becomes available | In progress [ ] Completed [x] No longer applicable [ ]  | EMS 2175, 2180, 2200 and 2205 are offered for the first time in Fall of 2013. As of the conclusion of Fall 2013, all National EMS Education Standards will have been implemented. Due to feedback from our CoAEMSP accreditation site visit, minor changes will occur within EMS 2105, 2125, 2150, and 2175. * Infectious Disease, Geriatrics, Psychiatric Disorders, Patients with Special Challenges, and Hazardous Materials Management / Terrorism will be covered earlier within the curriculum
* These topics will be reviewed within EMS 2175.
 |
| Become nationally accredited | In progress [x] Completed [ ] No longer applicable [ ]  | At the writing of this annual update, the self-study was submitted in Fall of 2012. A consultant was hired to provide input on the CoAEMSP accreditation process. CoAEMSP site visit occurred on October 2 and 3, 2013. Site visit revealed two minor curricular concerns. * Correction plans must be submitted by December 1, 2013.
* Formal voting regarding awarding of accreditation by CoAEMSP will occur in February of 2014.
	+ Everything indicates the college will be awarded national accreditation for the Paramedic program.
 |

Below are the Recommendations for Action made by the review team. Describe the progress or changes made toward meeting each recommendation over the last year.

| **RECOMMENDATIONS** | **Status** | **Progress or Rationale for No Longer Applicable** |
| --- | --- | --- |
| Continue to collect and analyze attrition/retention data to determine the effect of the mandatory attendance policy for paramedic students. If data supports, consider instituting the policy for EMT Basic students. | In progress [ ] Completed [ ] No longer applicable [x]  | Mandatory attendance is now in effect for both EMT and Paramedic courses.  |
| Continue to investigate the potential benefits and problems that might be associated with on-line/hybrid course delivery of 200 level EMS courses | In progress [ ] Completed [ ] No longer applicable [x]  | At this time, enrollment within the degree courses (2300 series) is too low to justify deployment of web development resources for online course creation.  |
| As the new associate’s degree program is implemented, monitor the demand and completion rates to determine the long term viability of the program.  | In progress [x] Completed [ ] No longer applicable [ ]  | See table 3. As of this writing, demand of the degree appears to have plateaued. Students are selecting this degree in rates of about 190-200 per Fall semester for the past 4 semesters. |
| Because most of the employment opportunity for graduates of this program is with regional fire departments, the department should ensure it continues to maintain a close and effective working relationship with the leadership of area fire departments. | In progress [x] Completed [ ] No longer applicable [ ]  | Information is obtained through graduate surveys, employer surveys, program resource surveys and by having employers on the EMS advisory committee. * During the CoAEMSP site visit, 14 people from local employers and/or the EMS Department Advisory Committee spoke on behalf of the program.
* The site team indicated this was a very large turnout – indicative of a very unique and supportive EMS community.
 |

**Section III: Assessment of General Education & Degree Program Outcomes**

The Program Outcomes for the degrees are listed below. **All program outcomes must be assessed at least once during the 5 year Program Review cycle, and assessment of program outcomes must occur each year**.

| **General Education Outcomes** | **To which degree(s) is this program outcome related?** | **Year assessed or to be assessed.** | **Assessment Methods****Used** | **What were the assessment results?** **(Please provide brief summary data)** |
| --- | --- | --- | --- | --- |
| Critical Thinking/Problem Solving | All programs | **2012-2013** | Medical/Cardiac Scenario Assessment | This tool is used to evaluate paramedic level critical thinking during a simulated patient encounter. * 128 testing events were conducted in Summer 2013 (EMS 2155).
	+ 58 students each taking 2 stations
	+ 91% First Pass
	+ 98% Aggregate Pass (1st and 2nd test)
* All students are required to pass this station to pass the paramedic program.
	+ One student failed without finishing testing process.
 |
| Values/Citizenship/Community | All programs | **2013-2014** |  |  |
| Computer Literacy | All programs | **2014-2015** |  |  |
| Information Literacy | All programs | **2015-2016** |  |  |
| Oral Communication | All programs | **2016-2017** |  |  |
| Written Communication | All programs | **2016-2017** |  |  |
|  |  |  |  |  |
| **Program Outcomes** | **To which course(s) is this program outcome related?** | **Year assessed or to be assessed.** | **Assessment Methods****Used** | **What were the assessment results?** **(Please provide brief summary data)** |
| Discuss how EMS management and critical care medicine knowledge can be used to motivate and change behaviors of EMS providers and EMS institutions. Include quality improvement, legal perspectives, funding streams, critical thinking skills and direct patient care applications.  | ENG 1101, COM 2206, COM 2211 EMS 2300,EMS 2305, EMS 2310, EMS 2315 EMS 2180EMS 2200, EMS 2205 | Starting 2013-2014 | EMS Department Degree Graduate Survey | Survey sent to all EMS degree graduates in Summer 2013(n=29).* Response Rate = 31% (9/29)
* 100% either agree or strongly agree to
	+ “As an EMS Degree holder, I am a better healthcare provider”
	+ “As an EMS Degree holder, I have the skills needed to handle complex patients”
* 78% either agree or strongly agree to
	+ “As an EMS degree holder, I am better prepared to limit my liability when functioning in the healthcare setting”
	+ 0% negative responses
 |
| Demonstrate entry-level competency in the cognitive, psychomotor and affective domains of paramedic education.  | PE Elect, MAT 1130, MAT 1440 HIM Elect, BIO 1107EMS 1150, EMS 1155, EMS 2100, EMS 2105, EMS 2110, EMS 2125, EMS 2130, EMS 2135, EMS 2150, EMS 2155, EMS 2160, EMS 2175, EMS 2180, EMS 2200, EMS 2205 | Yearly | Graduate SurveysEmployer Surveys | *Threshold areas defined as**1) Aggregate score below 3.0**2) Positive response rate (agree and strongly agree) below 70%**3) N/a response rate above 25%*1. Graduate Surveys: Spring 2012
	1. Trends
		1. 36% overall response rate (17 total surveys). After three mailings and numerous phone calls.
			1. CoAEMSP wants 70%.
		2. Statements beyond threshold
			1. I am a member of a state paramedic organization
			2. I am a member of a national paramedic organization
		3. Comment Themes:
			1. Well prepared / great program (37)
			2. More field time verses hospital time (10)
			3. More radio reports (6)
			4. More CPAP / Ventilators / Rapid sequence intubation (6)
			5. More ECG – 3 / 12/ 15 leads (4)
			6. Local protocols covered in class (3)
2. Employer Surveys: Fall 2012
3. Trends
4. 29% overall response rate (24 total surveys). After three mailings and numerous phone calls.
5. CoAEMSP wants 70%.
6. Statements beyond threshold
7. None
8. Comment Themes
9. Great program /satisfied (17)
10. Out performs other paramedic programs (7)
11. More team leading / time on ambulance (7)
12. Better interacting with family and patients / compassion (5)
13. Better report writing skills (3)
 |
| Discuss the behaviors of people when dealing with public service emergencies. Include characteristics related to EMS and fire and reflect on local, regional and historical perspectives.  | HUM Elect, ENG 1101, COM 2206, COM 2211 FST 1111, FST 1113, PSY 1100EMS 2135, EMS 2160, EMS 2175, EMS 2180 | Starting 2013-2014 | EMS Department Degree Graduate Survey | Survey sent to all EMS degree graduates in Summer 2013 (n=29).* Response Rate = 31% (9/29)
* 44% either agree or strongly agree to
	+ “As an EMS Degree holder, I know more about the history of EMS and EMS/Fire services.”
	+ 22% negative responses
* 89% either agree or strongly agree to
	+ “As an EMS Degree holder, I am able to make positive changes within the department where I work as a healthcare provider.”
	+ 0% negative responses
 |
| Describe how EMS operates within a fire service model: Include characteristics of crew configurations, job duties, job satisfaction, cross training and delivery of health care services.  | ENG 1101, COM 2206, COM 2211, FST 1112, FST 2230, EMS 2180EMS 2200, EMS 2205 | Starting 2013-2014 | EMS Department Degree Graduate Survey | Survey sent to all EMS degree graduates Summer 2013 (n=29).* Response Rate = 31% (9/29)
* 78% either agree or strongly agree to
	+ “As an EMS Degree holder, I know more about how EMS operates within the fire service.”
	+ 0% negative responses
* 78% either agree or strongly agree to
	+ “As an EMS Degree holder, I feel more like a professional”
	+ 0% negative responses
 |

**General Education Outcomes**

1. Are changes planned as a result of the assessment of general education outcomes? If so, what are those changes?
* Critical Thinking/Problem Solving
	+ Results indicate a high level of critical thinking as demonstrated within the paramedic program. With the implementation of the iPAD tracking laboratory evaluation system, faculty are now recording large amounts of data. Mining this data will provide the department an invaluable resource to use in making curriculum, administrative and programmatic changes.
* Written communication
	+ This area was identified last year by employers as an area needing improvement. To help accomplish improvement in this area, within both the EMT and Paramedic laboratories, students are now required to write mock patient care records. These records are now being evaluated by faculty. Additionally, in the clinical setting, paramedic students now have direct contact with faculty every three weeks. Students’ documentation skills are assessed in that setting as well.
	+ Employer survey’s from Fall 2013 and Fall 2014 should hopefully provide concrete evidence as to these efforts effectiveness.
1. How will you determine whether those changes had an impact?
* Critical Thinking/Problem Solving
	+ The data will be examined to determine if trends exist. These trends can be used to modify lesson plans, delivery modes, scenarios, etc.
	+ Employer and graduate data will also help to determine impact of changes within laboratory and overall implementation of semester curriculum.
* Written Communication
	+ It will take at least 2 years to see any change in the employer surveys. Employer surveys go out every fall. So the Fall 2012 survey is evaluating student who graduated last year. Fall 2013 will be the first opportunity to see any potential change in this area. The hope is that employers will see greater quality within the employee’s patient care reports.
	+ Anecdotal information from faculty seems to indicate improvement in documentation skills.

**Program Outcomes**

1. Are changes planned as a result of the assessment of program outcomes? If so, what are those changes?
* iPAD evaluation and assessment system.
	+ This system using web based data gathering tools, has allowed the department to more efficiently evaluate student performance.
		- Facutly are able to determine individual and group level performance.
		- Students are able to see their own performance regardless of which course the performance occurred.
		- Beginning Fall 2013, EMT and Paramedic programs are using the iPAD evaluation tools.
	+ Starting in Spring 2014, a more aggressive review of assessment data will be conducted.
* EMS Degree Survey
	+ The results of the degree student survey revealed the department is generally achieving the outcomes as outlined within the program.
		- The history of EMS and fire services was lower than desired. This result will be discussed with faculty teaching degree courses to determine next steps.
	+ Courses determined to be not valuable will be reviewed.
		- At an EMS advisory committee meeting in 2014, these results will be discussed laying the foundation for the program review in 2015.
			* Possible removal of the physical education requirement
			* Possible adding additional mathematics options and psychology / sociology options.
1. How will you determine whether those changes had an impact?
* As employer and graduate surveys return next year, it is hoped that graduates will have:
	+ Greater interpersonal skills – A new lab was added to the paramedic program to help teach this skill.
	+ Greater quality of documentation skills – students now have their documentation critiqued on a regular basis.
	+ Less knowledge / skills reported as needing to be reinforced within the program – the curriculum has already been changed to reflect those knowledge / skills deficiencies that were identified.
* A new degree survey will be fielded in 2015. Hopefully, there will be a larger number of graduates so results can have greater statistical significance.

**Improvement Efforts**

1. What were the results of changes that were planned in the last Annual Update? Are further changes needed based on these results?
* National Accreditation
	+ As a result of the CoAEMSP site visit, the following changes are being executed within the paramedic program:
		- Infectious Disease, Geriatrics, Psychiatric Disorders, Patients with Special Challenges, and Hazardous Materials Management / Terrorism topics were originally scheduled to be covered in EMS 2175.
		- These topics will be addressed within various courses earlier within the program. CoAEMSP requires all essential curriculum to be delivered before students begin their field internship rotation.
			* This material will be reviewed during the final semester of the program. Review of material is permitted during the field internship rotations.
	+ Clinical/Field Internship Hours Reporting
		- There exist discrepancies between the clinical hours reported within the paramedic student handbook and those reported within the individual clinical/field internship syllabi.
		- These documents will be better aligned to prevent confusion and ensure compliance with state and national accreditation bodies.
* Implementation of Semester Curriculum
	+ Anecdotal information from many EMS department faculty report that students within the semester curriculum appear to be out performing their quarter based counterparts.
		- Pass rates of the comprehensive final exam conducted in early December 2013 should show increased percentages of students who are able to pass this exam on the first / second attempt compared to quarter based students.
		- National Registry exam pass rates should reveal greater first time pass rates for this group.
		- The modification of laboratory teaching appears to be very effective. The model consists of three phases. Teaching new skills on one session, the following session consists of required skills repetitions, and then the final session is testing.
			* The number of formal tests conducted since Fall 2012 is 3867.
				+ 3649 (94.4%) passed the evaluation on the first test.
				+ 200 (5.2%) passed the evaluation on the second test.
				+ 18 (0.5%) passed the evaluation on the third test.
				+ These results demonstrate solid reinforcement of skills acquisition using this educational method.
1. Are there any other improvement efforts that have not been discussed in this Annual Update submission?

Not at this time.

**APPENDIX – PROGRAM COMPLETION AND SUCCESS RATE DATA**

**Degree and Certificate Completion**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Division | Department | Department Name | Program | FY 07-08 | FY 08-09 | FY 09-10 | FY 10-11 | FY 11-12 | FY 12-13 |
| BPS | 0666 | Emergency Medical Services | EBST.S.STC | . | . | . | . | . | 65 |
| BPS | 0666 | Emergency Medical Services | EBST.STC | 272 | 214 | 227 | 179 | 126 | 11 |
| BPS | 0666 | Emergency Medical Services | EMR.S.STC | . | . | . | . | . | 5 |
| BPS | 0666 | Emergency Medical Services | EMSFO.AAS | . | . | 5 | 2 | 8 | 4 |
| BPS | 0666 | Emergency Medical Services | EMSFO.S.AAS | . | . | . | . | . | 2 |
| BPS | 0666 | Emergency Medical Services | EMSVS.AAS | . | 1 | 1 | 1 | 3 | 1 |
| BPS | 0666 | Emergency Medical Services | EPST.CRT | . | . | . | 37 | 79 | 53 |
| BPS | 0666 | Emergency Medical Services | EPST.STC | 129 | 112 | 85 | 20 | 5 | 1 |

**Course Success Rates**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Department** | **Department Name** | **Course** | **FY 07-08** | **FY 08-09** | **FY 09-10** | **FY 10-11** | **FY 11-12** | **FY 12-13** |
| 0666 | Emergency Medical Services | EMS-105 | . | . | 85.7% | 100.0% | 83.3% | . |
| 0666 | Emergency Medical Services | EMS-1100 | . | . | . | . | . | 62.5% |
| 0666 | Emergency Medical Services | EMS-1150 | . | . | . | . | . | 47.5% |
| 0666 | Emergency Medical Services | EMS-1155 | . | . | . | . | . | 58.9% |
| 0666 | Emergency Medical Services | EMS-117 | 53.7% | 54.0% | 54.6% | 42.6% | 40.8% | 63.6% |
| 0666 | Emergency Medical Services | EMS-118 | . | . | . | . | . | . |
| 0666 | Emergency Medical Services | EMS-120 | 100.0% | 100.0% | 93.3% | 92.9% | 90.0% | 77.8% |
| 0666 | Emergency Medical Services | EMS-135 | 87.7% | 86.6% | 86.0% | 85.8% | 81.3% | . |
| 0666 | Emergency Medical Services | EMS-136 | 71.1% | 79.0% | 69.6% | 74.5% | 82.0% | . |
| 0666 | Emergency Medical Services | EMS-137 | 85.8% | 83.3% | 84.1% | 79.0% | 89.9% | . |
| 0666 | Emergency Medical Services | EMS-138 | 84.3% | 90.4% | 92.2% | 85.3% | 91.1% | 96.4% |
| 0666 | Emergency Medical Services | EMS-139 | 97.4% | 91.8% | 92.6% | 97.0% | 96.7% | . |
| 0666 | Emergency Medical Services | EMS-150 | 100.0% | 100.0% | 100.0% | 100.0% | 94.1% | . |
| 0666 | Emergency Medical Services | EMS-201 | . | 100.0% | 100.0% | 100.0% | 64.3% | . |
| 0666 | Emergency Medical Services | EMS-202 | . | 100.0% | 100.0% | 100.0% | 83.3% | . |
| 0666 | Emergency Medical Services | EMS-2100 | . | . | . | . | . | 89.7% |
| 0666 | Emergency Medical Services | EMS-2105 | . | . | . | . | . | 93.2% |
| 0666 | Emergency Medical Services | EMS-2110 | . | . | . | . | . | 95.8% |
| 0666 | Emergency Medical Services | EMS-2125 | . | . | . | . | . | 89.5% |
| 0666 | Emergency Medical Services | EMS-2130 | . | . | . | . | . | 92.3% |
| 0666 | Emergency Medical Services | EMS-2135 | . | . | . | . | . | 83.8% |
| 0666 | Emergency Medical Services | EMS-215 | . | 66.7% | 75.5% | 57.1% | 58.8% | . |
| 0666 | Emergency Medical Services | EMS-220 | . | 100.0% | 100.0% | 77.8% | 75.0% | . |
| 0666 | Emergency Medical Services | EMS-221 | . | . | 66.7% | 77.8% | 50.0% | . |
| 0666 | Emergency Medical Services | EMS-222 | . | . | 83.3% | 88.9% | . | . |
| 0666 | Emergency Medical Services | EMS-230 | . | 100.0% | 100.0% | 80.0% | 80.0% | . |
| 0666 | Emergency Medical Services | EMS-2305 | . | . | . | . | . | 100.0% |
| 0666 | Emergency Medical Services | EMS-2310 | . | . | . | . | . | 62.5% |
| 0666 | Emergency Medical Services | EMS-2315 | . | . | . | . | . | 100.0% |
| 0666 | Emergency Medical Services | EMS-9139 | . | . | . | . | . | 96.6% |

Questions regarding completion of the Annual Update? Please contact the Director of Curriculum and Assessment at 512-2789 to schedule a time to review the template and ask any questions.