PORTLAND COMMUNITY COLLEGE

Emergency Medical Services

PROGRAM/DISCIPLINE REVIEW

2014-15 Academic Year

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Allied Health, Emergency and Legal Services

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1. Program/Discipline Overview:

A. What are the educational goals or objectives of this program/discipline?

AAS: Emergency Medical Technician - Paramedic

- Act in accordance with the ethical and professional medical standards of the entry level Paramedic
- Meet the academic eligibility requirements for taking both cognitive and practical
 State and National Certification examinations at the Paramedic level
- Demonstrate communication skills of the medical environment in order to develop and maintain professional client relationships at the Paramedic level
- Demonstrate the professional and technical skill set necessary to meet the Paramedic standard of care in a safe manner under diverse conditions. 4.2009

One-Year Certificate: Emergency Medical Technician

- Act in accordance with the ethical and professional medical standards of the entry-level EMT.
- Meet the academic eligibility requirements for taking both cognitive and practical State and National Certification examinations at the EMT level.
- Meet the academic eligibility requirements to enter any Oregon Paramedic AAS degree program.
- Demonstrate communication skills of the medical environment in order to develop and maintain professional client relationships at the EMT level.
- Demonstrate the professional and technical skill set necessary to meet the EMT standard of care in a safe manner under diverse conditions. 03.2012

How do these compare with national or professional program/discipline trends or guidelines?

The outcomes are embodied, in content and spirit, in the current National EMS Education Standards.

Have they changed since the last review, or are they expected to change in the next five years?

Yes, minor changes in the educational goals/objectives have been made since the last review; no changes in these are expected in the next five years.

B. Please summarize changes that have been made since the last review. The minor changes in educational goals/objectives since the last review involved the One-Year Certificate.

A nationwide nomenclature change from "EMT-Basic" to "EMT" was implemented. Upcoming changes in the EMS Program have been approved by the Curriculum and Degrees and Certificates Committees. A new EMT Career Pathway Certificate and a new Advanced EMT Certificate are anticipated to be rolled out over the next year.

The existing EMT One-Year Certificate was designed for students who intend to move on to the Paramedic degree, but many EMTs do not progress to the Paramedic level. The new EMT Career Pathway Certificate is designed for students seeking entry-level jobs as EMTs. This career pathway is made up of existing courses within the EMT One-Year Certificate. While EMT licensure is attainable without additional training beyond our EMS 105 and 106 courses, EMTs need more than just an EMT license to legally operate an ambulance. The career pathway will provide completers with nearly all* of the training required of EMT

ambulance operators (*additional agency-specific training is required of, and by, employers). Proposal of this certificate was positively received, and unanimously approved by the Oregon EMS Education Consortium in early 2014. We have also received positive feedback from employers, and approval from our Advisory Committee, as it should provide for more field-ready EMTs while decreasing initial in-house training that EMT employers must provide under Oregon Administrative Rules. A similar certificate has already been approved by the Department of Education for Rogue Community College. The new Advanced EMT Certificate was designed in response to a new level of EMT established Nationwide since our last Program Review. This Certificate will provide Advanced EMT education which will primarily benefit students providing care in Oregon's rural communities, where access to Paramedics is limited due to location and funding restraints. Advanced EMT education is required in Oregon for AEMT licensure, but it is not a component of the Paramedic degree. Local demand by EMT employers and prospective students is evident by the many inquiries received over the last few years, and the local county training association has indicated it has at least 30 students ready to apply. The PCC EMS Program already has all the equipment, facilities, and appropriate staffing to provide this additional education.

C. Were any of the changes made <u>as a result of</u> the last review? If so, please describe the rationale and result.

No changes were made as a result of the last review.

- Outcomes and Assessment: reflect on learning outcomes and assessment, teaching methodologies, and content in order to improve the quality of teaching, learning and student success.
 - A. <u>Course-Level Outcomes</u>: Identify and give examples of changes made in instruction to improve students' attainment of <u>course</u> outcomes that were made <u>as a result of</u> assessment of student learning.

 Where key sequences exist (for example, MTH, WR, RD, FSOL) also include information

Where key sequences exist (for example, MTH, WR, RD, ESOL) also include information about any assessment-driven changes to improve student success at each level.

Clinical and field readiness simulations have been added to course terminal competencies to enhance professional standards in the corresponding paramedic (200 level) courses.

Clinical readiness simulations have been added as a terminal competency to EMS 242, prior to beginning of clinical (hospital) rotations in EMS 244/246. Field readiness simulations have been added to mandatory clinical labs during EMS 246, prior to beginning of field (ambulance) rotations. Professional standards & affective behaviors are not always easy to understand or demonstrate, but are necessary for successful course completion, as well as end-of-program entry level competence. Industry preceptors expect paramedic student interns to have a certain degree of competency prior to being mentored and evaluated during actual patient encounters. Simulation is an effective teaching/learning/evaluation tool for initial pre-patient contact, allowing the student intern to make mistakes in a safe environment.

Formative and summative simulation readiness assessment tools have been developed and are being used with a grading rubric (Simulation Standards.) Simulations are evaluated by experienced paramedics who have completed our program norming process. The program requires inter-rater reliability to be at or above 90%. We are tracking data to assess how effective our simulation program is for preparing students for the next level of clinical & field phases.

Use of clinical and field readiness simulations to improve the communication skills of the paramedic student intern have also been added to the 200 level courses, as above.

There is an expectation by clinical and field preceptors that paramedic student interns begin their rotations ready to perform, communicate and accept feedback on their performance during clinical and field rotations. Many EMTs enter the paramedic program lacking the ability to professionally accept and use verbal and/or written feedback to improve performance. Simulation feedback gives them the communication skills to respond positively and productively to verbal feedback, without becoming defensive. While cognitive and psychomotor skills are very important for the "technician", high competence in communication skills is critical for the professional paramedic.

The formative and summative simulations assessment tools include communications skills (affective behaviors) evaluation, as well as the professional standards as above. We continue to use the simulation evaluation data to assess course improvement, and ultimately program improvement.

B. <u>Addressing College Core Outcomes</u>

i. Describe how each of the College Core Outcomes are addressed in courses, and/or aligned with program and/or course outcomes.

http://www.pcc.edu/resources/academic/core-outcomes/index.html

Core Outcome	Course	Method
Communication	EMS 100	Limited application, but effective communication is critical concept of
		professional standards and roles of EMS personnel
	EMS 105	Full chapter devoted to professional communication
		Simulated patient interview scenarios
	EMS 106	Simulated patient assessment and interviewing scenarios
	EMS 113	Whole course devoted to patient and professional communication skills,
		using direct interviews, radio communications, professional
		documentation, etc.
	EMS 114	Focus on patient transportation, including communicating with colleagues
		during ambulance maneuvers
	EMS 115	Focus on effective communication to deal with personal crises, in an effort
		to maintain personal well-being
	EMS 116	Focus on safety, including effective communication with peers within the
		Incident Command Structure; including oral communication, use of radios,
		etc. in order to contribute to safe working environment. Field lab days
		employ use of radios for effective communication.
	EMS 118	Whole course devoted to proper use of medical terms, to enhance
		professional communication skills
	EMS 200	Professional interpersonal communication is key element in each course
	Level	Stresses and develops good communication skills with patients, colleagues,
	Courses	bystanders, other caregivers, etc.
		Didactic focus on therapeutic communication (key element of curriculum)
		Simulation exercises and clinical/field readiness simulation experiences
		stress professional and therapeutic communication, where competence is mandatory prior to progression to clinical and internship phases
		Clinical components focus on oral and written communication with clinical preceptors, and patient communication
		Internship components require all communication skills listed above, plus heavy focus on written communication with preceptors and faculty. Field components focus on communication with field preceptor, patient, ancillary personnel, physicians, nurses, family members and bystanders. Written communication using Patient Care Reports (PCRs) are required documentation. Competency in giving radio reports to receiving hospitals
	E1 10 :	is required verbal communication.
Community and Environmental Responsibility	EMS 100	Hazardous Materials Awareness component stresses environmental concerns in mitigation of has-mat situations
	EMS 105	Community Responsibility is key component of professional responsibilities
	EMS 106	within the EMS profession; including helping bystanders deal with critical
	EMS 113	incidents, educating the public on safety in the home/workplace on scene
		during emergency response, etc.

		,
	EMS 116	Addresses environmental responsibility during vehicle extrication exercises
		(e.g. vehicle fluid spill mitigation, etc.)
	EMS 200	Community responsibility progresses at the 200 level to include the move
	Level	to becoming a community resource for information and training.
	Courses	Community assessment goes beyond the EMS response to include
		prevention measures before a response is needed. Paramedic students
		are encouraged to become instructors in basic life support (CPR) not only
		for other EMS professionals, but for the lay public as well. Other specific
		training is also encouraged; such as water safety and safety during sports.
		Students must complete at least four hours of community service projects
		each term.
Critical Thinking	EMS 105	Key element of EMT curriculum on a national scale, woven into every
and Problem	EMS 106	patient encounter/simulation/psychomotor skill development experience
Solving	EMS 114	
Solving	EIVIS 114	Student ambulance operations labs require decision making based on
	EN 40 44 6	controllable and uncontrollable factors for safe practice
	EMS 116	Field labs require students to solve simulated problems using techniques
		covered in class. Examples include scenarios where student teams must
		access and develop and carry out rescue of patients in adverse situations
		(e.g. patient found in wilderness environment, off-road, down a hillside in
		the woods, and students must retrieve him/her using ropes, pulleys, and
		other manual equipment.)
	EMS 200	Paramedic students move from simple to complex scenario-based training
	Level	that encourages application of what they're learning in didactic. This is
	Courses	accomplished by using patient simulation, team-based thinking scenarios,
		realistic scenarios with variable outcomes, and student-group-facilitated
		presentations. In the beginning of the paramedic program, the depth and
		complexity of student knowledge are limited, and scenarios are simpler. As
		students move through the program, the scenarios become more complex
		as the student becomes more competent and aware of multiple level
		outcomes.
Cultural	EMS 105	Students required to assess and manage incidents with due respect for
Awareness	EMS 106	patients of diverse cultures and developmental challenges
- Awareness	EMS 113	Respect of diversity is stressed in program handbook and all PCC policies,
	EMS 115	
	EINI2 112	which are reviewed on day one and adhered to throughout every class
	51.4C 200	session
	EMS 200	Essential element during didactic training in the cognitive and affective
	Level	domains. The ability of the paramedic to understand and respond to
	Courses	unique cultural needs as it relates to patient history, assessment of
		presenting signs/symptoms and formulation of culturally appropriate
		treatment plans is crucial to providing competent care.
Professional	EMS 105	Professional competence in each psychomotor skill is mandatory for
Competence	EMS 106	successful course completion
		Attainment of these outcomes established through student success on
		State and National examinations
	EMS 200	Professional competence in all paramedic level psychomotor skills is
	Level	mandatory for successful course completion. Competency is required at a
	Courses	higher level through summative simulation evaluation for successful
		program completion.
		Propram completion.

		Attainment of these outcomes established through student success on
		State and National examinations.
Self-Reflection	EMS 200	Self-reflection is included in all 200 level courses. Simulations actively
	Level	require students to evaluate their performance by reviewing a video
	Courses	coupled with a written time-line of their actual skills performance.
		Students are also required to reflect on what they think they did correctly,
		and what they think needs improvement/correction. During clinical
		rotations, paramedic students record a summary of their daily
		performance from their own perspective, and craft a plan for
		improvement based on that summary. During field rotations, paramedic
		preceptors ask for self-critique of actual ambulance calls, and students
		document their discoveries using a plan for improvement.

ii. Update the Core Outcomes Mapping Matrix.

http://www.pcc.edu/resources/academic/core-outcomes/mapping-index.html single asterisk: these outcomes have been intentionally assessed as part of the SACs annual assessment work

<u>double asterisk:</u> these outcomes are expected to be a part of every faculty member's routine student evaluation/grading.

Core Outcomes Map

SAC EMS: Emergency Medical Services

0	Not Applicable
1	Limited demonstration or application of knowledge and skills
2	Basic demonstration and application of knowledge and skills
3	Demonstrated comprehension and is able to apply essential knowledge and skills
4	Demonstrates thorough, effective and/or sophisticated application of knowledge and skills

Core Outcomes:

- Communicatio
 n
- Community

 and
 Environmental
 Responsibility
- Critical
 Thinking and Problem
 Solving
- 4. Cultural Awareness
- 5. Professional Competence
- 6. Self-Reflection

Course #	Course Name	CO1	CO2	CO3	CO4	CO5	CO6
EMS 100	Intro to EMS	1	1	1	1	1	1
EMS 105	EMT Basic Part 1	1	1	1**	1	1**	1
EMS 106	EMT Basic Part 2	2	2	2**	2	2**	2
EMS 113	Emerg Svc Communications	3**	2	2	3	2	2
EMS 114	Emerg Svc Transportation	2	2	3	3	2**	2
EMS 115	Crisis Intervention	3**	3	2	3	3	3
EMS 116	EMT Rescue	2	3	3**	2	2	3
EMS 118	EMT Med Terminology	2**	2	2	2	3	2
EMS 240	Paramedic I	2**	2**	2**	2**	2**	2**
EMS 242	Paramedic II	3** *	3**	2** *	3** *	3** *	3** *
EMS 244	Paramedic Clinical I	3** *	3**	2** *	3** *	3** *	3** *
EMS 246	Paramedic Clinical II	3** *	3**	3** *	3** *	3** *	3** *
EMS 248	Paramedic Field Internship I	3**	3**	3**	3**	3**	4**
EMS 250	Paramedic Field Internship II	4**	4**	4**	3**	4**	4**
EMS 252	Paramedic III	4**	4	4**	3**	4**	4

C. <u>For Career and Technical Education Programs</u>: <u>Degree and Certificate Outcomes</u>

i. List your degree and certificate student learning outcomes, showing the alignment with the college core outcomes, and identify the strategies that are in place to assess the degree and certificate outcomes. (Feel free to use the Plan prepared in Fall 2013, updated as appropriate.)

Emergency Medical Services One-Year Certificate

Outcome	Core Outcome	Assessment Strategy
Act in accordance with the ethical and professional medical standards of the entry-level EMT.	Professional Competence	Assess results of National Registry cognitive exam and State practical exam
Meet the academic eligibility requirements for taking both cognitive and practical State and National Certification examinations at the EMT level.	Professional Competence	Assess successful completion of EMS 105/106 sequence
Meet the academic eligibility requirements to enter any Oregon Paramedic AAS degree program.	Professional Competence	Verify compliance with Oregon EMS Education Consortium Statewide Standardized EMT Certificate standards
Demonstrate communication skills of the medical environment in order to develop and maintain professional client relationships at the EMT level.	Communication	Students must perform effective radio communications in class; Students must write patient care reports following patient assessment and interviews; Students must effectively communicate with simulated patients in order to pass psychomotor skills
Demonstrate the professional and technical skill set necessary to meet the EMT standard of care in a safe manner under diverse conditions.	Cultural Awareness	Sensitivity to gender, gender orientation, racial, and cultural differences is monitored and observed in classroom and testing situations. Inappropriate affect is addressed by the instructor, faculty chair, and/or examiner with the student immediately in a private setting.

AAS-EMTP Degree

Outcome	Core Outcome	Assessment Strategy
Act in accordance with the ethical and professional medical standards of the entry level Paramedic	Communication Community and Environmental Responsibility Critical Thinking and Problem Solving Cultural Awareness Professional Competence Self-Reflection	 Clinical/Field formative & summative simulation scenarios Global Affective Professional Behavior Evaluation Daily Clinical Experience Log/Evaluation Field Internship Daily Performance Record Patient Care Reports Field Preceptor's Statement of Entry-Level Competency Medical Director's Statement of Program Competency National Registry of Emergency Medical Technician-Paramedic (NREMT-P) Cognitive & Psychomotor Examinations Graduate & Employer Surveys
Meet the academic eligibility requirements for taking both cognitive and practical State and National Certification examinations at the Paramedic level	Communication Critical Thinking and Problem Solving Professional Competence	 Clinical/Field formative & summative simulation scenarios Global Affective Professional Behavior Evaluation Daily Clinical Experience Log/Evaluation Field Internship Daily Performance Record Patient Care Reports Field Preceptor's Statement of Entry-Level Competency Medical Director's Statement of Program Competency National Registry of Emergency Medical Technician-Paramedic (NREMT-P) Cognitive & Psychomotor Examinations Graduate & Employer Surveys
Demonstrate communication skills of the medical environment in order to develop and maintain professional client relationships at the Paramedic level	Communication Cultural Awareness Professional Competence	 Clinical/Field formative & summative simulation scenarios Global Affective Professional Behavior Evaluation Daily Clinical Experience Log/Evaluation Field Internship Daily Performance Record Patient Care Reports Field Preceptor's Statement of Entry-Level Competency Medical Director's Statement of Program Competency National Registry of Emergency Medical Technician-Paramedic (NREMT-P) Cognitive & Psychomotor Examinations Graduate & Employer Surveys
Demonstrate the professional and technical skill set	Communication Critical Thinking and	Clinical/Field formative & summative simulation scenarios

Outcome	Core Outcome	Assessment Strategy
necessary to meet the Paramedic standard of care in a safe manner under diverse conditions. 4.2009	Problem Solving Professional Competence	 Global Affective Professional Behavior Evaluation Daily Clinical Experience Log/Evaluation Field Internship Daily Performance Record Patient Care Reports Field Preceptor's Statement of Entry-Level Competency Medical Director's Statement of Program Competency National Registry of Emergency Medical Technician-Paramedic (NREMT-P) Cognitive & Psychomotor Examinations Graduate & Employer Surveys

The following three questions are essentially the same as are asked for in the Annual Assessment report. Please provide a link to those, and summarize the results here.

http://www.pcc.edu/resources/academic/CTEReports.html

ii. Briefly describe the assessment design and processes that are used to determine whether students have met the outcomes of their degree or certificate.

Direct assessment was used to assess the entire population of 24. A rubric was used for evaluation and assessment, and inter-rater reliability exceeded recommended levels. Clinical and Field Readiness Simulations and the Global Affective Professional Behavior Evaluation tools are used for assessment. The assessment tools and processes used have proven to be highly effective.

iii. Summarize the results of the assessments of these outcomes.

The results represent an assessment in progress, which will be completed at the end of the 2014 calendar year. The Paramedic Program runs on a calendar year, not an academic year, so results from spring term, 2014 (limited assessment) are only a small piece of the overall assessment of the communication skills outcomes. Full interpretation of the course outcome attainment is not possible until all data have been obtained. The SAC can, however, interpret results from the spring term data as an indicator of positive progression of the overall project. With 100% (n24) of the students attaining desired results, the SAC has determined that students are meeting the goals. As each student worked through four different simulation scenarios, they were exposed to different patient ages, chief complaints and cultural backgrounds. This improved their ability to communicate effectively, under stress, in a "safe" environment. Communication exercises include patient interviewing techniques, relating with others on-scene, etc. Rater debriefing at the end of each simulation improved student acceptance of both positive feedback and identification of areas needing improvement. There was also improvement of the ability to effectively work through ethical and professional issues. At the end of the term, both the Clinical Readiness Simulation and the Global Affective Professional Behavior Evaluation tools showed 100% (n24) competence in all areas evaluated.

iv. Identify and give examples of changes that have been made to improve students' attainment of degree and certificate outcomes that are based on the results obtained from assessment. The Simulation Performance Standards rubric is a new tool being used here for the first time in 2014. This tool made norming of the simulation raters more consistent and repeatable, and provided appropriate standardized feedback language. At this time, it appears to be effective and we will be looking more extensively at its value throughout the Cohort year. If it is determined at the end of 2014 that changes are needed, those changes will be implemented during the 2015 program year.

3. Other Curricular Issues

A. To what degree are courses offered in a Distance modality (on-line, hybrid, interactive television, etc)? For courses offered both via DL and on-campus, are there differences in student success? (Contact the Office of Institutional Effectiveness, either Laura Massey or Rob Vergun, for course-level data). If so, how are you, or will you address these differences? What significant revelations, concerns or questions arise in the area of DL delivery?

Currently, EMS-specific courses are not available through distance learning. The EMS education community (including PCC) had some experience with interactive television instruction of EMTs in the late 1990s. The degree of success realized with that experiment depends upon who you ask. For various reasons, including limitations of available technology and loss of funding, further attempts have not been made locally or regionally since that time. Oregon has not yet approved additional on-line instruction for initial certification/licensure of EMTs, but we do use existing on-line educational resources to formally address certain topics (e.g. Hazardous Materials Awareness and Incident Command System) in some non-certification courses (e.g. EMS 100) through FEMA.gov.

Non-EMS general education courses, which are available through distance modality and approved by the College, are accepted toward completion of EMT academic certificates and degrees where they are applicable (e.g. Medical Terminology, Math, Writing).

B. Has the SAC made any curricular changes as a result of exploring/adopting educational initiatives (e.g., Service Learning, Internationalization of the Curriculum, Inquiry-Based Learning, Honors, etc.)? If so, please describe.

Yes, the paramedic program has embraced the Service Learning model. The first two didactic sections of the paramedic program (EMS 240, EMS 242) require four hours each of volunteer service. The clinical courses (EMS 244, EMS 246) require four hours of service total, and the field courses (EMS 248, EMS 250) require four hours of service total. The paramedic students will have completed a minimum of sixteen Community-Service-Based Learning hours (or more) by the completion of the paramedic program. They verify their hours with a documentation form that encourages a brief self-reflection of their experience, and is kept with their individual program records.

Many students have participated in week-long camps, such as the Muscular Dystrophy Camp and Burn Camp in our communities. They have reported an increased awareness of the medical and social needs of these special-needs children. This experience allows the students to feel at ease when responding to ambulance calls involving patients with special healthcare needs. For many students, this experience has raised their awareness of civic responsibility.

C. Are there any courses in the program that are offered as Dual Credit at area High Schools? If so, describe how the SAC develops and maintains relationships with the HS faculty in support of quality instruction.

Historically, the only PCC EMS course offered as Dual Credit was EMS 120, but this course is not currently a component of either the EMS Certificate of Degree programs. Starting with academic year 2014/15, Washington County Fire District #2 hopes to offer EMS 100 as a dual credit course in western Washington County. Work is currently under way to approve DC instructors to present this course in high schools there. PCC faculty and WCFD2 personnel meet in accordance with Dual Credit program standards in order to

facilitate quality instruction and appropriate delivery of curriculum, in accordance with Oregon accreditation standards.

D. Does the SAC plan to develop any additional Dual Credit agreements with area high schools? If so please describe. If not, what does the SAC see as barriers to developing further dual credit agreements?

See "C" above.

Please describe the use of Course Evaluations by the SAC.
 Have you developed SAC specific questions?
 Has the information you have received been of use at the course/program/discipline level?

The SAC has developed and used SAC specific questions in the past, but are not using those specific questions at this time. A very poor return rate of less than 50% is the norm for EMS courses using PCC online evaluations. While some limited-value information may be available at the course level for feedback purposes, program evaluation should not be based on a return rate that may include only a majority of dissatisfied students (those receiving lower grades, for instance), rather than an appropriate sample size. The current evaluations do provide instructor feedback that may not otherwise be available to individual instructors.

Program specific evaluations (versus PCC evaluations) are used at the paramedic level during every course within the program. Paper/pencil evaluations are still being used; as they can provide a "ticket-out-the-door" return of 100%

Course evaluations for didactic and skills lab include: Instructor evaluations, guest speaker evaluations, medical director speaker evaluations, lab evaluations, simulation evaluations, lab assistant evaluations, affective evaluation and a course evaluation. Clinical (hospital) and Field (ambulance) evaluations include ongoing (throughout the course) evaluations of clinical sites, clinical preceptors, field sites and field preceptors. Affective evaluations are completed for every course. At the completion of EMS 252, the capstone course, a program evaluation is completed as well as a graduate survey. Graduate surveys are requested at six and twelve months post program completion as well. Employer surveys are completed by advisory committee members, and resource assessment by advisory members and faculty.

All paramedic program evaluations and surveys are used for ongoing program improvement, and include assessment, evaluation and planning. This is required of the program director and program to maintain national accreditation. The annual report includes program assessment based on evaluations and surveys, and actions plans to address areas needing improvement and/or revision.

F. Identify and explain any other significant curricular changes that have been made since the last review.

Recent changes in the EMT One-Year Certificate and AAS EMT-P Degree have been minimal. The most significant have been made based on Statewide changes which modified certain non-EMS courses required for graduation (e.g. elimination of Computer course requirement, allowances for higher-level Writing, Speech, Math courses).

4. Needs of Students and the Community

A. How is instruction informed by student demographics?

As the following tables illustrate, the EMS student population demographics have been quite consistent over the past three academic years. (Note: "N" shows different totals between the tables in the same years; this may be partly explained by students who decline to respond to some data points.)

Race/Ethnicity Distribution	Total	Foreign National	Multi- Racial	African American	Pacific Islander	Asian	American Indian/Alaska Native	Hispanic	White Non- Hispanic
	N	%	%	%	%	%	%	%	%
2011-12	652	0.6	2.9	2.0	0.3	3.8	1.5	6.2	82.5
2012-13	576	0.2	4.5	3.5	0.2	3.6	0.9	6.8	80.4
2013-14	512	0.6	5.1	3.5		2.9	0.8	6.8	80.3
PCC Credit Students	34,000	3	4	6	(Combined with Asian)	8	1	10	68

EMS student headcount has decreased somewhat, but the distribution of race/ethnicity has dropped slightly in the Pacific Islander, Asian, Native American/Alaska Native, and White Non-Hispanic categories, while increasing slightly in others.

According to college-wide statistics, the majority of enrollment decline has been in the White, Non-Hispanic group, while the self-identified "Multi-Racial" group has grown each year since that data collection category was added in 2009. The small declines in Asian/Pacific Islanders, and Native Americans likely contributed to the Multi-Racial group increase. The race/ethnicity distribution of PCC credit students is similar to the community population. (Source: Diversity Goal Report to PCC Board of Directors, 2012-13)

Gender Distribution	Total	Female	Male
	N	%	%
2011-12	724	30.1	69.9
2012-13	629	29.7	70.3
2013-14	556	32.0	68.0

The relative female population has increased, while the male population has declined somewhat. The EMS student gender distribution is quite similar to that of EMS faculty.

B. Have there been any notable changes in instruction due to changes in demographics since the last review?

There have been no notable changes in instruction due to changes in demographics since the last review.

C. Describe current and projected demand and enrollment patterns. Include discussion of any impact this will have on the program/discipline.

Enrollment is declining somewhat in the 100-level EMS courses, but that is occurring throughout the college, and even state-wide. Administration has directed a reduction in course offerings, given budget and future enrollment outlooks, but this does not appear to be causing a significant change in the number of degree completers for the Program. Consequently, we anticipate a continued modest decrease in the number of 100-level course offerings, but no change in the 200-level ones. Student applications for the Paramedic year continue to outnumber the space we have for prospective Paramedic students by at least two-to-one, given the historical and ongoing state-wide capacity of clinical and internship resources.

D. What strategies are used within the program/discipline to facilitate access and diversity?

In an effort to meet our mission of meeting the needs of the community, the PCC EMT Program has sought to facilitate access by providing standardized, accelerated, and customized EMT courses throughout its District. EMT courses, for example, have been provided at a number of sites, including:

PCC sites: Cascade Campus, Willow Creek Center, Liberty High School

Course formats include mornings, daytimes, and evenings; and meet from one to four days per week. In addition, continuing education classes are available on weekends. Courses are also offered through high schools in dual credit programs.

Other activities used to recruit students from diverse backgrounds include presentations and participation at:

Job Fairs
High School Career Fairs
National Night Out
Oregon EMS Conference
High School Student facility tours
Emergency Services Programs Open House
Emergency Services interdisciplinary staged-scenario drills (open to the public)

E. Describe the methods used to ensure that faculty are working with Disability Services to implement approved academic accommodations?

EMS course syllabi contain references to the PCC Disability Services resources. On the first day of each class, students are informed that they may access this resource, and all EMS faculty are responsive to accommodation requests by that office. When the need arises, faculty make outreach to DS personnel for clarification of any accommodation requests, and have found those persons to be helpful in finding ways to facilitate student learning, within the standards of the profession.

F. Has feedback from students, community groups, transfer institutions, business, industry or government been used to make curriculum or instructional changes (if this has not been addressed elsewhere in this document)? If so, describe.

EMS curriculum is driven by State and National Standards, so local input has limited impact. The EMS Advisory Committee, however, is informed of current and planned instruction, and provides input and feedback on instructional changes. Most notably, recent increasing use of simulation exercises has been applicated by Advisory Committee

members, and local EMS employers have made unsolicited positive comments on the high caliber of graduates' field readiness and critical thinking and decision making skills. We believe this positive feedback to be a result of increased use of simulation and field readiness evaluations prior to degree completion.

5. Faculty: reflect on the composition, qualifications and development of the faculty

A. Provide information on

i. Quantity and quality of the faculty needed to meet the needs of the program/discipline.

The EMS Program instructional staff includes two full-time faculty, two full-time Academic Professionals (AP), and eight part-time faculty. In addition to instructional staff is our Medical Director, Dr. Greg Hoskins, MD, who is contracted to provide medical oversight as required by Oregon Administrative Rule (OAR) and the Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP). All four full-time staff are licensed paramedics; both APs instruct courses and substitute as needed. Of the eight adjunct faculty members, two are Oregon licensed Intermediates (one is scheduled to complete the PCC Paramedic Program in December, 2014), and six are Oregon licensed Paramedics. It is important to note that OARs state that an EMT "course director" of any level must: "hold at least the level of Oregon licensure as the course being taught and be in good standing with the Authority, and have at least three years of experience at that licensure level or higher". Course director is a term used by the Oregon Health Authority in the OAR context that is synonymous with instructor. Every member of the instructional staff assigned to teach EMT, Advanced EMT, Intermediate and Paramedic courses meets or exceeds the level of licensure required; all staff far exceed the minimum years of experience required. See Appendix 5A.

Cumulatively, the full-time PCC EMS education staff have been certified/licensed as EMS providers a total of 95 years; an average of 23.75 years each.

Of full-time faculty, highest degrees earned include one Master, one Bachelor, and two Associate degrees.

ii. Extent of faculty turnover and changes anticipated in the next five years.

The Faculty Department Chair will be retiring in April, 2015. In the event this full-time faculty position vacancy is filled by a staff member currently serving in an Academic Professional or part-time faculty position, essentially two positions would be affected.

iii. Extent of the reliance upon part-time faculty and how they compare with fulltime faculty in terms of educational and experiential backgrounds.

Enrollment, established FTE limitations for part-time faculty, the number of courses necessary to support the 1-year certificate, and the 2-year degree program, are all factors in the extent of reliance upon part-time faculty for adequate instructional coverage. Historically, this program offered every EMT course in the one-year certificate every term. With global enrollment decline, this practice may be revised. Another determinant in demands for instructors is continuing education. Oregon requires all four levels of EMTs to recertify every two years. This process requires CEU ranging from 12 to 48 hours. The National Registry of EMTs requires recertification every 3 years and has even greater mandates than Oregon. In an effort to serve the needs of licensed EMTs in the Portland metropolitan area and southwest Washington, PCC offers more EMT CEU opportunities than any other institution in Oregon. Our EMS refresher courses have attracted students from as far away as Klamath Falls and Pendleton. In addition, licensed EMTs coming into Oregon from other states must complete specific training requirements for reciprocity. In response to requests from local EMS employers, PCC has developed customized courses to meet those workforce needs.

The Dean's Enrollment Report for the 2013 calendar year indicates this department had a total of 178.45 FTE. Full-time faculty instructed 33.5% (59.74 FTE) and part-time faculty instructed 66.5% (118.71 FTE).

Of part-time faculty, highest degrees earned include four Bachelor, two Associate, and two non-degrees.

Another point of interest: every one of the current adjunct faculty have completed some level of EMT training at PCC, worked in the EMS profession, and then returned to teach.

iv. How the faculty composition reflects the diversity and cultural competency goals of the institution.

Gender distribution of the 12-instructor cadre is 33% female and 67% male. All identify either as White, Non-Hispanic, or prefer not to respond.

Among casual employees involved with EMT classes and evaluation, 37% are female and 63% are male.

Race/ethnicity self-identification is as follows:

Asian/Pacific Islander: 2.4%

American Indian/Alaska Native: 2.4%

White, Non-Hispanic: 80.5% Prefer not to respond: 14.6%

B. Report any changes the SAC has made to instructor qualifications since the last review and the reason for the changes.

No changes have been made to instructor qualifications since the last review.

C. How have professional development activities of the faculty contributed to the strength of the program/discipline? If such activities have resulted in instructional or curricular changes, please describe.

Jacki Williams:

Jacki Williams, as program director, has been actively involved as a national accreditation Site Visitor (SV) for CoAEMSP, participating in 2-5 site visits annually. Experience as a SV means intimate familiarity with the self-study and accreditation process, as well as extensive knowledge of the accreditation Standards & Guidelines. Our program is greatly strengthened by this experience and knowledge. Jacki has been involved in Peer Review of SAC reports on their End-Of-Year (EOY), Annual Plan (AP) and Multi-Year Plan (MYP) for assessment of outcomes. This is the 4th year of participation in Peer Review. The PCC faculty-led assessment of student learning supports the paramedic program (degree) by keeping current on report formats, which are constantly evolving, and the best practices of creating and using meaningful assessments of the students. It also strengthens familiarity with norming practices for assessments and use of evaluation rubrics. She attends the Oregon EMS Conference every year for continuing education hours and networking opportunities. Jacki has also attended two National Association of EMS Educators (NAEMSE) national symposiums in the last five years, which has helped guide instruction from straight lecture to facilitation of more small-group discussion and classroom student led large group discussion.

Dennese Kelsay:

Dennese Kelsay has observed multiple PCC Paramedic classes with PCC faculty and guest lecturers speaking on specific topics pertinent to current assessment and treatment

practices of trauma and medical patients, medical/legal issues, and advances in the use of high-fidelity simulation in education. Dennese has also participated as an evaluator for paramedic student case presentations each year. Both activities provide fresh content to share with students in EMS education

Mark Hornshuh:

Since the 2010 Program Review, Program Specialist Mark Hornshuh has earned professional technical certificates in rope rescue, swiftwater rescue, and safety officer education. These are all categories pertinent to various levels of EMS education and practice, and help to make courses like EMS Rescue (EMS 116) more relevant for students. Additionally, annual attendance of the Oregon EMS Conference provides opportunities for professional networking, as well as access to new relevant material for presentations at PCC. Mark remains current in "real-world" EMS by serving as a volunteer firefighter and paramedic for the mostly-rural Banks Fire District in Washington County, where field experiences become bases for student learning scenarios in the classroom and lab. Robert Victorino:

Robert has attended state, local, and industry conferences on EMS education and simulation to incorporate cutting edge ideas and equipment into the PCC simulation program. Robert has also been invited to present simulation software programming methods developed by PCC EMS simulation staff at industry conferences. This process exposes our simulation techniques to educational colleagues for peer-review and feedback.

Robert currently practices as a 911 paramedic with a local EMS/Rescue service to facilitate inclusion of up-to-date medical trends in our simulation program and classroom. In addition, Robert has continues work toward completion of a Bachelor's Degree in EMS Management with the ultimate goal of MPH.

6. Facilities and Support

A. Describe how classroom space, classroom technology, laboratory space and equipment impact student success.

Most EMS courses maintain enrollment of 20 to 30 students. Classrooms comfortably seat 30 or more, and there is ample attached laboratory space at both the Cascade Campus and Willow Creek facilities to accommodate any EMS class. Classrooms are equipped with smart lecterns with computer and projection capability. Laboratory spaces are attached to dedicated equipment storage areas for EMS-specific education, complete with state-of-the-art manikins and simulation equipment, medical equipment and supplies, etc. Additionally, we have adapted actual ambulances to enhance the classroom environment to promote believability in student simulation experiences. These experiences include exercises in patient assessment and treatment, transportation, and even ambulance operations. Our laboratories have been visited by representatives from other schools across the State as models for other programs.

B. Describe how students are using the library or other outside-the-classroom information resources.

On-line experiences are becoming more relevant as technology evolves. Currently there are several components of EMS courses which are completed online. Examples include:

- National Incident Management System, a required component of EMS 100 completed through the FEMA website
- Hazardous Materials Awareness, a required component of EMS 100 completed through the FEMA website
- EMT PASS, an optional tool students may purchase to assist in preparation for National cognitive EMT exams
- Pre-course testing for specialty courses at the EMS 200 level completed online at the specialty course websites

C. Provide information on clerical, technical, administrative and/or tutoring support.

The Program does not receive technical support through the tutoring office for EMS-specific courses, but we do offer optional skills labs at the end of each term. These labs are designed as CEU courses for which students can register and get faculty-moderated small-group instruction, including access to manikins and equipment, in order to hone psychomotor skills before taking their certification/licensure exams. They have also attracted EMT candidates from other schools, who find it convenient to take their exams at PCC.

D. Provide information on how Advising, Counseling, Disability Services and other student services impact students.

New EMS students are encouraged to meet with Advisor Michelle Butler to prepare academic plans for pursuit of Emergency Services certificates and degrees. Michelle regularly meets with EMS faculty, and attends SAC and Advisory Committee meetings, in order to provide the most current information to students. As mentioned elsewhere, Disability Services is referenced in course syllabi, and students are encouraged to make use of these services as appropriate. When faculty identify students as having significant difficulty with course progress, they meet with those students and offer suggestions, including referral to Academic Advisors and other student resources. Formal Course Progress Notifications are also used to inform students and others within the PCC System

as appropriate, and other student services are referenced and posted throughout PCC buildings, literature, and online.

DeAnne Hardy, Assistant Coordinator, Career Services: Student Employment and Cooperative Education Specialist has supported EMS students of all levels in acquiring the skills essential for acceptance into academic and professional positions. These skills include developing interview strategies and writing resumes.

E. Describe current patterns of scheduling (such as modality, class size, duration, times, location, or other), address the pedagogy of the program/discipline and the needs of students.

As mentioned in 5Aiii above, all but the 200-level EMS courses have been offered historically every term. With (decreasing) trends in enrollment, some course offerings will likely be modified on a rotating schedule, with an identifiable pattern that will be shared with advising personnel as that plan is developed. Care is taken to avoid offering EMS classes with conflicting schedules, in order to minimize negative impact on students, and courses are offered at various times of the day when possible. We have experimented with varied class formats (e.g. traditional 11-week courses, accelerated 5-week courses, seminar-type weekend courses) and find that most students appear to prefer traditional full-term courses, with the exception of one section of accelerated EMS 105/106 which generally fills every term.

- Career and Technical Education (CTE) Programs only: to ensure that the curriculum keeps pace
 with changing employer needs and continues to successfully prepare students to enter a career
 field.
 - A. Evaluate the impact of the Advisory Committee on curriculum and instructional content methods, and/or outcomes. Please include minutes from the last three Advisory Committee meetings in the appendix.

The advisory committee provides guidance and information regarding the local emergency services community needs and expectations. The committee meets two to three times in an academic year, and it contributes greatly to the growth and development of the program. Members representing the industry become familiar with the program and its operations, help assess the needs of the program, identify and help secure needed resources, and work cooperatively toward solutions. Members also assure that the program addresses employment and educational needs of the professions, serves as a communication link and advocate for the program, assists in assessment and evaluation, and reviews the course and program offerings. The program is responsive to these needs through frequent assessments of students, graduates, faculty and employers, as well as annual committee member surveys.

Terminal results of each program cohort are presented to the advisory committee for review. This review includes reasons for attrition (academic versus non-academic), success on the National Registry exams, graduate satisfaction, and employer satisfaction. In all areas, we evaluate the performance of program graduates in the three learning domains (cognitive, psychomotor, and affective) and determine if adjustments need to be made to the program in the teaching process, clinical/field environment, or program policy.

The advisory committee also reviews all minimum competency requirements, including team leads, achievement of goals, analysis of the goals, action plans, and results of the action where appropriate. Review of the annual report and other objective data that supports program evaluation is included.

B. How are students selected and/or prepared (e.g., prerequisites) for program entry?

All prerequisites required for the Oregon state wide paramedic degree must be completed prior to applying to the program. Selection is based on a point value system based on several factors such as experience, GPA factors, and higher degrees, among others. A point value is also attached to entrance testing in the form of an EMT written competency exam and an EMT practical skills simulation. Post testing, the applicants respond to a 4-5 person interview panel. Each applicant is scored over all aspects of entry requirements and placed in descending order. The top 24 applicants are offered seats in the next paramedic cohort.

When the next cohort has been established to begin the next Winter Term, students must attend an 8 hour orientation day set in November. The applicants are given vital information needed to become a successful paramedic student at PCC.

C. Review job placement data for students over the last five years, including salary information where available.

Job placement of PCC Paramedic Program graduates within one year of graduation is surveyed using a Graduate Survey tool distributed at the time of completion and post-graduation at 6 & 12 months. In the last 5 years, positive job placement at the time of

graduation has remained steady at approximately 75%, based on 100% return of surveys. It is difficult to track positive job placement numbers within 1 year of graduation due to poor compliance rate of return of graduate surveys. The 6 month survey generally meets the threshold of 50% or greater, but this number decreases greatly at 12 months postgraduation.

Positive job placement is considered to be employed with the individual using the knowledge and skills attained from the paramedic program, either paid or volunteer. A paramedic graduate employed as an EMT is not considered positive placement.

Individual salary information per employer is not available. It is known however, that Oregon paramedic salaries show a lot of variation, depending on a wide range of factors, such as amount of experience, market competitiveness, population and rural/metropolitan locations.

Forecast future employment opportunities for students, including national or state forecasts if appropriate.

Employment opportunities for paramedic graduates are predicted to continue in the following areas: private and public ambulance services, fire departments, hospitals, air flight services, water rescue, ski patrols, tactical medical teams, park services and community paramedic roles.

The country's aging population is expected to keep job prospects high for both EMTs and paramedics. The Bureau of Labor Statistics (BLS) projects EMT and paramedic national employment growth of 23.1 percent between 2012 and 2022, adding 55,300 more professionals nationally.

Please present data on the number of students completing Degree(s) and/or Certificate (s) in your program.

Year	Certificates Awarded*	Degrees Awarded
2009/10	0	21
2010/11	1	19
2011/12	2	22
2012/13	2	24
2013/14 (through Spring	9	20
Term)		

^{*} It appears that significantly more students complete the requirements for the one-year certificate than submit application to receive it. Efforts are being made to heighten awareness in order to encourage deserving students to acquire it.

Analyze any barriers to degree or certificate completion that your students face, and identify common reasons that students may leave before completion.

Some examples of barriers to successful completion include:

- Time management has proven to be a real factor in the unsuccessful completion
 of the degree. Despite detailed information describing the rigors of this Program,
 and testimony provided by past students in an orientation setting, several
 students have been academically unsuccessful due to personal choices regarding
 time management.
- One paramedic student from the 2013 cohort only completed the first 2 weeks of the program and then withdrew. She determined this was not the profession for

- her, it was too emotionally taxing. A second from the 2013 cohort withdrew after a few clinical rotations during the Spring term, citing emotional and financial hardships of the profession.
- One paramedic student from the 2013 cohort successfully completed up through
 the second phase of clinical during the summer term before withdrawing in good
 standing to pursue a full-time career positions as EMT/Firefighter. He will return
 to complete during Fall, 2014. Another student completed everything successfully
 up to completion of the last field phase. He seemed clinically competent in the
 field; however he did not complete his field requirements. He has not responded
 to multiple attempts to contact him.
- Two students from the 2012 cohort completed all prerequisites, the didactic courses, clinical rotations, and the first phase of field internships. Both of them were hired into full-time career positions as EMT/Firefighters. One was able to return to complete the field internship in Winter, 2013. The other returned Spring, 2014 to complete field internship.
- Students sometimes independently realize that this career is not suited to them for personal reasons.
- Some find that their criminal backgrounds limit their likelihood for successful completion and/or certification.
- Some become certified at the EMT level and find that driving records really can make them ineligible for hire with certain agencies.

E. Describe opportunities that exist or are in development for graduates of this program to continue their education in this career area or profession.

Discussions have been initiated between OIT and PCC regarding development of an articulation agreement leading to an EMS Bachelor's Degree. Further details are not available at this time.

F. Describe and explain any additional changes that have been made to the program since the last program review.

Noteworthy highlights since the 2010 Program Review include:

- addition of a full-time Academic Professional to fill the new position of EMS Clinical Coordinator
- development and implementation of a medium and high-fidelity simulation training program that has received state and national recognition and praise
- a successful 2013 Oregon Department of Education Accreditation resulting in no deficiencies and very high commendations
- a successful 2012 Commission on Accreditation of Allied Health Educational Programs (CAAHEP) national accreditation of the paramedic program through CAAHEP's Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP). PCC's Paramedic Program received initial accreditation without violations or citations, nationally, one of only two programs to do so.

8. Recommendations

A. What is the SAC planning to do to improve teaching and learning, student success, and degree or certificate completion?

Encouraging students to apply for and receive one-year certificate by raising awareness in the classroom. All those who intend to complete the paramedic year must complete the requirements of the certificate, but historically, few have applied for it. In 2015, we will roll out two new certificates; the EMS Career Pathway Certificate and the Advanced EMT Certificate.

What support do you need from administration in order to carry out your planned improvements (for recommendations asking for financial resources, please present them in priority order. Understand that resources are limited and asking is not an assurance of immediate forthcoming support, but making administration aware of your needs may help them look for outside resources or alternative strategies for support.)

Administration has already supported plans for the two new certificates. This is why we have an implementation date of 2015 for both, as indicated previously.

Classrooms are equipped with smart lecterns, however we have been unable to get the AV department to permanently install software which will facilitate our use of publisher-provided media to compliment power point presentations. AV support in this matter would augment the teaching/learning environment in the classroom.

APPENDIX 5A

OREGON HEALTH AUTHORITY, PUBLIC HEALTH DIVISION DIVISION 265 EMERGENCY MEDICAL SERVICES PROVIDERS

333-265-0020

Approved EMT, AEMT, EMT-Intermediate, and Paramedic Course Director

- (1) A course director for a specific course must:
- (a) Be an EMS Medical Director; or
- (b) Hold at least the level of Oregon licensure as the course being taught and be in good standing with the Authority, and have at least three years of experience at that licensure level or higher, and:
- (A) Have a current healthcare provider CPR instructor card or certificate of course completion that meets or exceeds the 2010 American Heart Association ECC guidelines or equivalent standards approved by the Authority;
- (B) Have successfully completed one of the following:
- (i) The National Association of EMS Educator Course, developed by the U.S. Department of Transportation, 2002;
- (ii) The National Fire Protection Association (NFPA) Fire Instructor I or Fire Service Instructor I and II programs developed by the Department of Public Safety Standards and Training (DPSST);
- (iii) At least 40 hours of the Instructor Development Program offered by the DPSST; or
- (iv) A minimum of three college credits in adult educational theory and practice or vocational educational theory and practice from an accredited institution of higher learning;
- (C) Participated in the Course Director Program offered by the Authority; and
- (D) Participated in the Course Director Program updates offered by the Authority.
- (2) In addition to the Course Director requirements in section (1) of this rule, a Paramedic Course Director must:
- (a) Be an EMS Medical Director and hold a current:
- (A) American Board of Emergency Medicine Certificate; or
- (B) Advance Cardiac Life Support (ACLS) Instructor certificate and Advance Trauma Life Support certificate or equivalent as approved by the Authority; or
- (b) Be a licensed Paramedic in good standing with the Authority with at least three years of experience at the licensure level and:
- (A) Possess at least an associate's degree from an accredited institution of higher learning;
- (B) Hold an Advance Cardiac Life Support (ACLS) Instructor certificate from the American Heart Association or equivalent that has been approved by the Authority; and
- (C) Hold a Basic Trauma Life Support (BTLS) Instructor certificate or equivalent that has been approved by the Authority, or a Pre-hospital Trauma Life Support (PHTLS) Instructor certificate or equivalent that has been approved by the Authority.
- (3) A guest instructor must:
- (a) Be qualified and have the expertise in the specific course subject; and

(b) Follow the course curriculum and meet the course objectives for that specific subject.