Bachelor of Science: Emergency Medical Services Management

Department of EMS

Section 1 – Program Mission

Describe the purpose of the degree program – why it exists and what distinguishes it from other units or programs. How is it aligned with the university's Core Themes (Core Theme 1: Applied Degree Programs; and Core Theme 2: Student and Graduate Success).

Department Mission:

The Department of Emergency Medical Services supports Oregon Tech's mission to offer innovative and rigorous applied degree programs in health technologies and management, and to foster student success with hands-on learning environments, focusing on application of theory to practice. The faculty and alumni of the EMS department have a strong history of partnering with local and national constituents to provide technical expertise and leadership.

Core Theme 1: Applied Degree Programs: We are dedicated to providing the highest quality education in the EMS industry as demonstrated through the caliber of our faculty, the tremendous success of our alumni, and the enthusiastic support of our EMS employers.

Core Theme 2: Student and Graduate Success: Our aim is to continue to partner with high potential students, from diverse backgrounds and perspectives, and assist them in becoming national EMS clinical and organizational leaders.

Core Theme 3: Statewide Educational Opportunities: We will continue supporting bold intellectual pursuits that advance and expand the EMS industry's comfort zone in order to improve and innovate both the quality of individual patient care as well as the systems of EMS care.

Core Theme 4: Public Service: We strive to partner with communities, industry, other colleges and universities, and private citizens to develop community-based solutions to community problems

Program Mission:

The BS in EMS Management is designed to provide advanced clinical EMS training, an understanding of general management principals, and hands-on applied training on the specific EMS management challenges experienced in the industry today.

The EMS department at Oregon Tech is focused on the following core values:

· Quality: We are dedicated to providing the highest quality education in the EMS industry as demonstrated through the caliber of our faculty, the success of our alumni, and the enthusiastic support of our EMS employers.

· Leadership: Our aim is to continue to partner with high-potential students, from diverse backgrounds and perspectives, and assist them in becoming national EMS clinical and organizational leaders.

· Innovation: We will continue supporting bold intellectual pursuits that advance and expand the EMS industry in order to improve the quality of individual patient care as well as the systems of EMS care.

Section 2 – Program Educational Objectives

Describe the educational objectives of the degree program – it exists to prepare students for what sorts of professional opportunities? Where is it intended graduates will end up – both immediately after graduation and five to ten years out.

The following objectives are what the faculty expects graduates from the program to be able to accomplish within the course of the program. No changes were made in the annual review of the objectives. The alumni from the BEMS program at Oregon Tech / OHSU should:

1. Foster professional growth in communication, teamwork, ethics, inquiry and analysis, quantitative literacy, and diversity.
2. Prepare students to advance their professional medical training in all the major areas of pre-hospital clinical practice.
3. Establish a framework for students to develop an awareness and practice of current EMS management challenges.

Section 3 – Program Description and History:

Program History:

The Bachelor's in EMS Management (BEMS) is a joint offering from OHSU's Department of Emergency Medicine - EMS Section, and Oregon Tech - Department of EMS. The full BEMS degree has been available to Oregon Tech students since AY 14-15. OHSU staff and physicians provide subject matter expertise and clinical partnerships for the BEMS advanced clinical education courses. Graduates of the BEMS have advanced knowledge and education in EMS Management and Systems, Clinical Education and Research.

The BEMS program is the first of its kind in Oregon. Nationwide EMS industry standards require certification while only two states require associates degrees. There has been increasing interest and demand for managers and educators with a bachelor’s degree.

Locations:

The didactic portion of the program is offered through a mix of in-person courses at the Portland Metro Campus, blended and online platforms. Clinical and externship experiences are located in various EMS, hospital and social services in the Greater Portland Metro area.

Enrollment:

Major Code	Fall 2015	Fall 2016	Fall 2017	Fall 2018
BEMS	28	31	28	21
APEP	27	27	29	24
Total:	55	58	57	45

Graduates:

Major Code	Spring 2016	Spring 2017	Spring 2018	Spring 2019
BEMS	1	1	0	2

Employment Rates:

Unavailable. Anecdotally, BEMS students tend to be employed within the industry while pursuing higher education for the purposes of promotion and/or career change.

Board and Licensure Exam Results:

Not applicable at the program level. Advanced clinical courses, Critical Care Paramedic and Community Paramedic have associated certification examinations. However, industry does not yet require certification for employment. Departmental efforts are being made to encourage certification as a minimum standard in these specialties.

Industry Relationships:

The BEMS degree offers each student opportunities to engage with industry partners including EMS organizations, Oregon State EMS Office, hospitals, clinics and a variety of social services. Each partner organization works closely with faculty to foster high-quality learning opportunities that make progress on real-world challenges.

Showcase Learning Experiences:

- Advanced clinical internship rotations in a variety of hospital intensive care units, low-income clinics, EMS organizations, Oregon State EMS Office and a variety of social services in the Portland Metro Area
- High fidelity simulations in clinical courses
- EMS industry externships, providing momentum to current industry issues

Success Stories:

"I am learning more in the Community Paramedicine program about the world I've been navigating as a paramedic for 39 years. I'm being given tools, insights and new concepts that enrich me personally and help me develop professionally. Being in this program enriches each shift that I work in my current job, and fills me with optimism about my — and my career's — future." ~ Janina Kerr-Bryant, Oregon Tech student

Janina recently secured her dream job, working as a Community Paramedic for a prominent EMS organization. Her participation in the BEMS course helped make her the primary candidate over others seeking the position.

Section 4 – Program Student Learning Outcomes

Identify your programs' 5-10 program learning objectives. This content should remain relatively static from year to year, although programs should regularly review outcomes both internally and with external partners to ensure that they remain current. Are there any changes to program student learning outcomes for 2017-18? If so, please provide this update. Link to Bloom's Taxonomy: http://oregonstate.edu/instruct/coursedev/models/id/taxonomy/#table

Resources on Program Student Learning Outcomes:

- https://manoa.hawaii.edu/assessment/howto/outcomes.htm
- https://www.jmu.edu/assessment/_files/How%20to%20Write%20Clear%20Objectives.pdf
- https://www.jmu.edu/assessment/_files/Objectives%20Made%20Easy.pdf

From these objectives stem a number of specific and measurable outcomes. In addition to being more specific, the outcomes state what students should be able to demonstrate while in the program and provide evidence that the objectives are also being met. Upon graduation from the BEMS program at Oregon Tech / OHSU, students should possess:

- Have awareness in all, and proficiency in most, of the different medical service offerings provided in the EMS industry today.
- Articulate general management practices and their role in the EMS industry.
- Read and critically evaluate how research in EMS is developed and contributes to EMS practices.
- Take a hands-on leadership role in helping to solve current day EMS management challenges in the community.

Section 5 – Curriculum Map

Please complete a table with entire program curriculum with selection for PSLO and ESLO assessment at the Foundation, Practice and Capstone levels. This content should remain relatively static from year to year, but should be updated as the program curriculum map changes.

Emergency Medical Services Management B.S. Community Care Track Student Learning Outcomes Table

F – Foundation
P – Practice
C – Capstone

COURSE	PSLO 1	PSLO 2	PSLO 3	PSLO 4	ESLO 1	ESLO 2	ESLO 3	ESLO 4	ESLO 5	ESLO 6
FRESHMAN YEAR										
FALL TERM										
WR 121 – English Composition										
BIO 231 - Human Anatomy and Physiology I										
EMS 151 - Emergency Medical Technician (EMT) I	F									
MATH 111 - College Algebra										
WINTER TERM										
BIO 232 - Human Anatomy and Physiology II										
EMS 152 - Emergency Medical Technician (EMT) II	F									
SPE 111 - Public Speaking										
WRI 122 - Argumentative Writing										
SPRING TERM										
BIO 233 - Human Anatomy and Physiology III										
EMS 115 - Introduction to EMS	F									

PSY 201 - Psychology										
Bio 200 – Medical Terminology										
Humanities Elective										
SOPHOMORE YEAR										
FALL TERM										
CHE 210 - Clinical Pharmacology										
EMS 218 - Trauma Emergencies										
EMS 231 - Medical Emergencies I										
EMS 235 - Basic Electrocardiography										
EMS 241 - Paramedic Crisis Resource Management I	P									
EMS 271 - Paramedic Skills Laboratory I										
WINTER TERM										
EMS 211 - Prehospital Emergency Pharmacology										
EMS 232 - Medical Emergencies II										
EMS 236 - Advanced Electrocardiography										
EMS 242 - Paramedic Crises Resource Management II	P									
EMS 272 - Paramedic Skills Laboratory II										
EMS 283 - Clinical Practicum I										
or										
EMS 284 - Clinical Practicum II										

SPRING TERM										
EMS 233 - Medical Emergencies III										
EMS 273 - Paramedic Skills Laboratory III										
EMS 243 - Paramedic Crises Resource Management III	P									
EMS 283 - Clinical Practicum I										
or										
EMS 284 - Clinical Practicum II										
EMS 291 - Paramedic Field Externship Practicum I										
SUMMER TERM										
EMS 292 - Paramedic Field Externship Practicum II										
JUNIOR YEAR										
FALL TERM										
ECO 201 – Economics, Micro										
BUS 317 - Health Care Management		**C**								
BUS 337 - Principles of Health Care Marketing										
WRI 227 – Technical Writing										
WINTER TERM										
BUS 313 - Health Care Systems and Policy										
ECO 202 - Principles of Macroeconomics										

EMS 321 - Community Paramedic I	C									
OR										
EMS 331 - Critical Care Transport 1	C									
AND										
EMS 342 - Community Paramedic Clinical II										
OR										
EMS 381 – Critical Care Clinical Practic. 1										
SPRING TERM										
PSY 347 - Organizational Behavior										
SPE 321 - Small Group and Team Communication										
Humanities - 300 or 400 Elective										
EMS 322 – Community Paramedic 2	C									
OR										
EMS 332 - Critical Care Transport 2	C					P				
AND										
EMS 342 – Community Paramedic Clinical 2										
OR										
EMS 382 – Critical Care Paramedic 2										
SENIOR YEAR										
FALL TERM										
BUS 349 - Human Resource Management I										

MATH 361 - Statistical Methods I										
PHIL 331 - Ethics in the Professions										
WRI 327 - Advanced Technical Writing										
WINTER TERM										
BUS 316 - Total Quality in Health Care										
EMS 496 - Capstone Project I										
EMS 456 - Research Methods in EMS			C							
MATH 362 - Statistical Methods II										
Math, Science, or Social Science Elective (upper division)										
SPRING TERM										
BUS 467 - Service Management										
EMS 497 - Capstone Project II			C							
EMS 444 - EMS Systems Leadership and Management		C								
Math, Science, or Social Science Elective (upper division)										

Section 6 – Assessment Cycle

Please complete a table to show PSLO and ESLO year cycle starting with this academic year. This content should remain relatively static from year to year, although it should be extended by at least one year each time a new report is submitted.

Outcome	2017-18	2018-19	2019-20
PSLO 1		Direct Assessment Indirect Student Exit Survey	
PSLO 2			Direct Assessment Indirect Student Exit Survey
PSLO 3	Direct Assessment Indirect Student Exit Survey		
ESLO 1			
ESLO 2	Direct Assessment Indirect Student Exit Survey		
ESLO 3		Direct Assessment Indirect Student Exit Survey	
ESLO 4			Direct Assessment Indirect Student Exit Survey
ESLO 5			
ESLO 6			

Section 7 – Methods for Assessment

Each PSLO should be assessed with 2 direct measures and 1 indirect measure. Please provide the methods for assessment for this academic year. In many cases, it may make sense to organize this section by outcome and/or assessment activity, and to integrate description of methods, results, interpretation, and action plans. Description of methods can be completed as soon as assessment activities are identified (ideally in fall term of each academic year); Results, Analysis, and Action Plans should be completed after assessment data are collected.

Assessment not carried out in 2018-2019 due to extremely low enrollment in the DEMS degree program. The Department of EMS will work to identify appropriate assessment methodology that might yield valuable insight with such low sampling potential.

8. Evidence of Improvement in Student Learning.

If this is an outcome being assessed on your standard schedule, did you have past results from this outcome? If this is a specifically scheduled "closing the loop" assessment, how do this year's results compare with the results that prompted improvements?

Did you have past action plans? Can you say that data supports that those plans resulted in improvements?

Low enrollment in PSLO courses have restricted the ability to conduct proper assessment. The BEMS Degree is still relatively new to Oregon Tech and a B.S. is uncommon in the industry. The Dept. of EMS faculty have been and will continue to encourage 1st and 2nd year students to continue their education and pursue a B.S. while pushing industry standards toward a degree requirement. In addition, advertising and recruitment efforts have and will continue to grow.

Many students elect to gain working experience prior to returning to school to pursue additional education. This reality has prompted faculty to brainstorm ways to encourage graduating associates paramedic students to continue education without taking a gap year.

9. Data-driven Action Plans: Changes Resulting from Assessment

Changes to the curriculum are not necessary at this time based on low enrollment in PSLO courses. EMS faculty will continue to work with Oregon Tech advertising and recruitment resources to bolster current efforts. In addition, EMS faculty are increasing their internal advertising to current 1st and 2nd year students to encourage matriculation into upper division courses without delay.