
**Bachelor of Science: Emergency Medical Services Management
Department of EMS****Section 1 – Program Mission**

Department Mission:

The EMS department 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: The B.S. in EMS management degree utilizes faculty expertise in EMS, management and advanced clinical care to provide students with the skills necessary to advance above the rank of field provider in EMS.

Core Theme 2: Student and Graduate Success: Alumni of the paramedic program are found in all major EMS organizations in Oregon and hold many prominent roles in organizations across the country. Graduates of the B.S. in EMS Management degree are qualified to hold Director, Officer and Chief positions within EMS organizations. By partnering with local and national leaders in EMS the program is able to assist students in becoming national EMS clinical and organizational leaders.

Core Theme 3: Statewide Educational Opportunities: The department has partnered with leaders at the largest and most progressive EMS organizations in the state and country to offer students the opportunity to engage with industry partners in a meaningful way.

Core Theme 4: Public Service: Emergency medical services is public service. The foundation of all EMS department offerings is to provide quality, equitable care to the communities our students serve. The program grows each student's ability 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

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 associate's degrees at the paramedic level. 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 agencies, hospitals, and social service agencies in the Greater Portland Metro area.

Enrollment:

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

Graduates:

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

Employment Rates:

100%. Graduates were employed while in school and are still employed in the EMS industry.

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

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

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)										
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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.

Narrative for each assessment activity should ideally include:

- Description of the activity (assignment and its course context) and assessment method at a level that makes it clear that the activity is a reasonable measure of the outcome. Assignments can be attached as an appendix.
- Description of the rubric or scoring method, again at the level of detail that makes it clear the rubric is a reasonable tool to assess the outcome. Rubrics can be attached as an appendix.
- If relevant, discussion of parallels in assessment processes across sites. Although assessment processes do not need to be identical between different sites, the same measures should be assessed in comparable ways
- Identification of target performance criteria (and, ideally, a justification for why the targets were set at a certain level).
- Description of scoring process (Faculty raters? External raters? Multiple raters for reliability?)
- Clear presentation of results (and, where possible, comparison with past performance on the same outcome).

- Description of how results were presented to and discussed by program faculty.
- Interpretation of results, including discussion of factors such as assignment design, course context, instructor, etc., that may have impacted student performance.

PSLO 3: Read and critically evaluate how research in EMS is developed and contributes to EMS practices.				
Performance Criteria	Assessment Methods	Measurement Scale	Minimum Acceptable Performance	Results
Demonstrate knowledge of the strengths and weaknesses of common research methodologies	Final Exam	A-F evaluation	75% average class performance	TBD
Describe effective research methodology to investigate an EMS challenge	Final paper and presentation evaluate by course instructor using rubric	0-20 points	75% class average	TBD

EXAMPLE: (Format is not mandatory, but is meant for guidance. Choose the approach that works for your program).

PSLO 1: Klamath Falls Campus, CIV 100, 201701, Seth Anthony				
PSLO 1: An ability to apply knowledge of mathematics, science, and engineering.				
Performance Criteria	Assessment Methods	Measurement Scale	Minimum Acceptable Performance	Results
Demonstrates knowledge of the professional code of ethics.	Ethics assignment evaluated by course instructor using Oregon Tech's Ethics Rubric.	1-4 according to attached criteria	75% of students scoring 3 or higher	75% more than 3 75% = 4
Describes ethical issue using code of ethics	Ethics assignment evaluated by course instructor using Oregon Tech's Ethics Rubric.	1-4 according to attached criteria	75% of students scoring 3 or higher	100% more than 3 50% = 4

8. Evidence of Improvement in Student Learning.

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.