



Pierce College Applied Baccalaureate Degree Program
Fire Services Leadership and Management

Program Proposal

Revised April 29, 2019

“There’s always been the vision of Fire and Emergency Services Higher Education (FESHE) from way back at its beginning – a theoretical foundation – that a core set of courses should form the basis of knowledge that every firefighter should have regardless of where he or she came from.”

— Ed Kaplan, education chief National Fire Academy

**COVER SHEET
NEW DEGREE PROGRAM PROPOSAL**

Program Information

Institution
Name: Pierce College

Degree: Fire Services Leadership and Management
(Statement of Need originally submitted as Fire
Command and Administration. The program Advisory
Board recommended the program name change above to
better align the program with current industry need and
practice) CIP Code: 43.0202

Name(s) of the existing technical associate degree(s) that will serve as the foundation for this program:

Degree:	<u>Associates in Applied Science (AAS) in Fire Command and Administration</u>	CIP Code: <u>43.0202</u>	Year Began: <u>2008</u>
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Degree:	<u>Associates in Applied Science (AAS) in Homeland Security Emergency Management</u>	CIP Code: <u>43.0302</u>	Year Began: <u>2007</u>
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Planned Implementation Date (i.e. Fall 2014): Fall 2019

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Date 1/25/19

Table of Contents

Introduction	1
Criteria and Standards	
Criteria 1 – Curriculum Demonstrates Baccalaureate Level Rigor	3
Criteria 2 – Qualified Faculty	11
Criteria 3 - Selective admissions process consistent with an open door institution	13
Criteria 4 - Appropriate student services plan	14
Criteria 5 - Commitment to build and sustain a high quality program	18
Criteria 6 - Program specific accreditation	21
Criteria 7 - Pathway options beyond baccalaureate degree.....	21
Criteria 8 - External expert evaluation of program	22
Figures	
Figure 1: National Emergency Services Sector	1
Figure 2: National Professional Development Model	2
Figure 3: Rigor/Relevance Framework	4
Tables	
Table 1: General Education Courses for the BAS-FSLM degree	7
Table 2: Lower Division Coursework for BAS-FSLM degree	8
Table 3: Junior and Senior Level Coursework for BAS-FSLM degree	8
Table 4: BAS-FSLM Program Framework (4 year Student Schedule Illustration)	9
Table 5: Faculty Credentials	12
Table 6 - General Course Prerequisite Faculty Credentials: Pierce College	12
Table 7: Sample of Online Accessible Library Resources	16
Table 8 Projected BAS-FSLM Revenues & Expenses	20
Appendices	25

NEW DEGREE PROGRAM PROPOSAL

INTRODUCTION

Pierce College proposes to deliver an online Bachelor of Applied Science degree in Fire Services Leadership and Management (BAS-FSLM) and is prepared to enroll students in the program beginning fall 2019. The Statement of Need for the BAS proposal was originally submitted as Fire Command and Administration. At their December 7, 2018 meeting the Advisory Board recommended a program name change to create a stronger alignment between the program and current industry practices.

On November 1, 1974, President Gerald Ford established the National Fire Prevention and Control Administration, known today as the United States Fire Administration, by signing the Federal Fire Prevention and Control Act of 1974, Public Law 43-198 into law. Now an entity under the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA), the mission of the U.S. Fire Administration is to provide national leadership to foster a solid foundation for our fire and emergency services stakeholders in prevention, preparedness and response in both paid and volunteer capacities.

The Emergency Services Sector is comprised of five distinct disciplines that integrate a wide range of services. Fire and Emergency (Rescue) Services are organized as distinct disciplines under the National Emergency Services sector. Other disciplines include emergency medical services, emergency management, law enforcement and public works. (Figure 1)

The Fire and Emergency Services sector has become more complex with professionals required to have new skill sets and understand the multifaceted nature of the industry. There is a growing recognition of the need for whole community involvement within the sector, which includes cross-functional planning with other disciplines and agencies. Additionally, the Fire and Emergency Services sector faces an aging workforce at or near retirement where succession planning has now become a priority.

As the traditional career pathways into the Fire Services sector began to change, a need emerged for agile career professionals who understand the complex cross-functional nature of fire services/rescue, emergency medical services, emergency management, law enforcement and public works. Combined with a workforce at or near retirement the need for a comprehensive program to prepare incumbent fire professionals for career advancement became apparent.

The alignment of training and education has been recognized as a critical factor that contributes to the overall competency of the Fire Services professional. To achieve consistency in training and education the U.S. Fire Administration collaborated with two and four year Fire and Emergency Management programs to create standards for post-secondary institutions to promote higher education and to enhance the recognition of fire and emergency services as a profession to reduce loss of life and property from fire



Figure 1: National Emergency Services Sector

and other hazards. This resulted in the *Fire and Emergency Services Higher Education* model or FESHE.¹ The idea for creating the FESHE model is recognition within the institutions of higher education that firefighters and fire officers, armed with the knowledge and a college degree, can reduce the human and economic impact of fires in their communities. FESHE has established a structure of national level committees to maintain the program. They meet annually at the National Fire Academy. All FESHE model courses are reviewed and updated by these advisory committees every three years—most recently in 2018. FESHE courses are designed for online delivery.

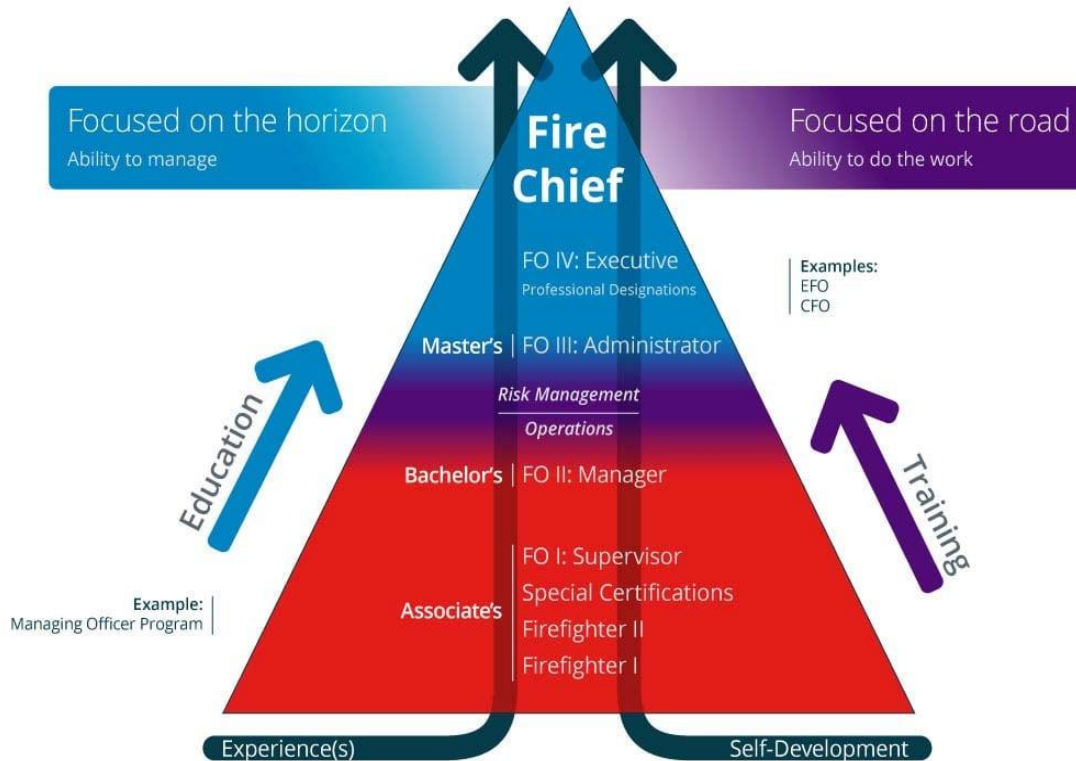


Figure 2: National Professional Development Model

The Pierce BAS-FSLM degree program will be designed to support the goals and objectives of the U.S. Fire Administration and FEMA to provide Fire Services professionals with the knowledge and skills they need to progress on their career pathway into supervisory, management and administrative positions and meet the succession planning needs of the sector.

Pierce will design the BAS-FSLM program to build upon its existing AAS in Fire Command and Administration (to be renamed to Fire Services Leadership and Management) and extend the curriculum to encompass the FESHE Bachelor Degree Model. “FESHE leaders have produced, through consensus, a standardized undergraduate curriculum that is national in scope, content and outcomes. This represents a major paradigm shift from a fragmented system of education to one that is unified and integrated. All the courses share student learning outcomes, catalog descriptions, outlines and text recommendations that provide a national core of knowledge and competencies. This curriculum linkage represents a milestone

¹ https://www.usfa.fema.gov/training/prodev/about_feshe.html

in fire and emergency services education. It provides for a seamless articulation of coursework between institutions and between associate and bachelor programs.”²

Criteria 1: Curriculum Demonstrates Baccalaureate Level Rigor

The BAS-FSLM degree will be designed as a FESHE certified program, an approach that integrates knowledge and skills and measures students’ competency in terms of mastery against a developed body of knowledge. This learning model sets a bar for what graduates need to know and be able to do as successful leaders and managers.

Pierce BAS program developers have identified the following FESHE recommended courses to form the foundation of the BAS-FSLM curriculum. Program emphasis will be on:

- Fire Services Administration
- Ethics and Leadership
- Management and Administration
- Political and Legal Foundations for Fire Protection
- Community Risk Reduction & Problem Solving
- Disaster Planning and Control
- Human Factors Affecting Fire Service Organizations
- Fire Dynamics
- Fire Prevention Organization and Management
- Application of Fire Services Related Research

On December 7, 2018 the proposed career pathway courses for the BAS-FSLM degree program were presented to the FSLM Program Advisory Board. At the meeting the Board discussed the program’s General Education Requirements in the context of the Fire Services industry and analyzed the proposed 300 and 400 level courses using the Rigor/Relevance framework in a modified DACUM (Developing a Curriculum) process. (See Appendix B for Rigor/Relevance Course Analysis)

The Advisory Board unanimously approved the BAS-FSLM program outcomes, 300 and 400 level courses, student outcomes and a name change for the program from Fire Command and Administration to Fire Services Leadership and Management. The rationale for the program name change is to better reflect the learning outcomes and application of the degree program within the Fire Services industry sector.

The BAS-FSLM degree will challenge students to think critically, solve problems, communicate clearly, and collaborate across organizations in an increasingly complex technological environment. A variety of assessment tools will be used to assess student competencies against stated program outcomes to validate that learning has occurred. Traditional testing and evaluation processes will compile evidence of student learning to be evaluated by industry practitioner/educators teaching in the program. Learning is further evaluated in an applied setting of in-station training. The student qualifies for award of the BAS-FSLM degree by demonstrating how they can independently apply their knowledge and complete FSLM work assignments.

Curriculum Framework

The BAS-FSLM degree will consist of standardized courses with outcomes developed and validated by the U.S. Fire Administration through FESHE, the International Fire Chiefs Association (IFCA) and the National Fire Protection Association (NFPA). Industry relevance will be corroborated by local and regional Fire Services professionals through the Pierce FSLM Program Advisory Board. All courses and

² https://www.usfa.fema.gov/training/prodev/model_courses.html Retrieved from web September 2, 2018.

student outcomes will be validated against the six increasingly complex levels of knowledge acquisition.³ These six levels of intellectual development include acquisition of knowledge in ascending order: 1) Awareness, 2) Comprehension, 3) Application, 4) Analysis, 5) Synthesis, and 6) Evaluation.

As a basis for establishing and demonstrating baccalaureate level rigor, the BAS-FSLM degree will apply the Rigor/Relevance Framework model developed by the International Center for Leadership in Education (ICLE).⁴ Figure 3 below illustrates the relationship between complexity of thinking and flexibility of application.⁵ Bloom’s Taxonomy provides a level of versatility in program design and will be used as an additional evaluation tool to gauge the level of rigor embedded in program and student outcomes, instructional materials, lessons, and assessments for existing curriculum. The taxonomy will also be applied to courses being developed for the BAS degree to ensure the appropriate level of rigor is designed into new BAS-FSLM course materials.

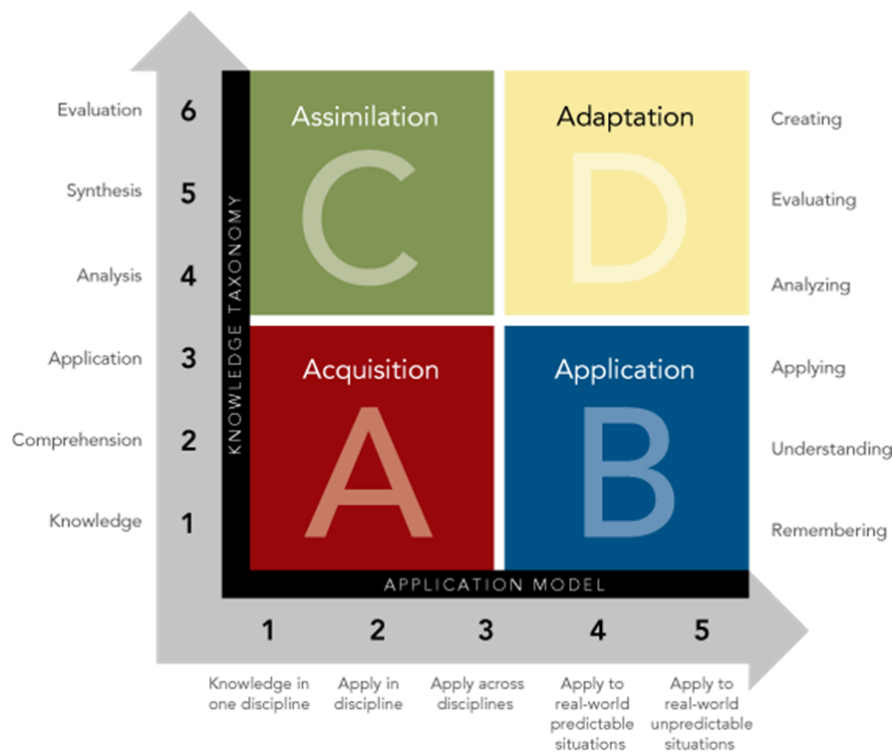


Figure 3: Rigor/Relevance Framework

Framework Quadrants Defined

A - Acquisition	Students gather and store bits of knowledge and information. Students are primarily expected to remember or understand this knowledge.
B - Application	Students use acquired knowledge to solve problems, design solutions, and complete work. The highest level of application is to apply knowledge to new and unpredictable situations.
C - Assimilation	Students extend and refine their acquired knowledge to be able to use that knowledge automatically and routinely to analyze and solve problems and create solutions.
D - Adaptation	Students have the competence to think in complex ways.

³ Blooms Taxonomy

⁴ International Center for Leadership in Education (2014)

⁵ Daggett, B., *If Not Common Core, Then What?: Rigor and Relevance: The Foundation of Effective Instruction*. International Center for Leadership in Education. (2014).

BAS-FSLM developers have modified the Rigor/Relevance Framework for use in the Pierce College FSLM program (Figure 3). The modified framework serves as a platform for plotting outcomes data from a program, course, student outcomes, or assessments resulting in tangible data that visually depicts how the BAS-FSLM program leads to baccalaureate level rigor through each step of the program design and development process.

As mentioned previously, the FSLM Advisory Board applied the Rigor/Relevance Framework and conducted an analysis of the proposed BAS 300 and 400 level courses, student outcomes and program outcomes. The results of the analysis are included in Appendix B.

Program Evaluation Criteria and Process

Pierce College is dedicated to an ongoing continuous improvement process to ensure program relevance and student success. A comprehensive approach to the evaluation process will include new processes, as well as established procedures:

- Pierce College has implemented a Career Pathways model based on four principles to assist students in achieving success: 1) Clarify the Path, 2) Help Students Get on a Path, 3) Help Students Stay on Their Path and 4) Ensure Students are Learning. Career Pathways focuses on six overall career “paths,” narrowing to more specific areas particular to student interests. Career Pathways is embedded into the FSLM program design. The FSLM career map is being carefully designed by the Pierce FSLM program developers in collaboration with Fire Services industry professionals.
- The FSLM program Advisory Board is convened twice during the academic year to review FSLM program goals and assess program outcomes. FSLM courses have been approved by the Advisory Board and analyzed by Fire Services professionals to ensure rigor and industry relevance.
- To assure that community Fire Services education needs are translated successfully to the student as learning objectives a rigorous national standard is being applied to all online courses based on the Quality Matters (QM) Program. QM is a national quality assurance program that establishes benchmarks for continuous improvement of online course design and incorporates an internal and external review process. QM serves as a model for the FSLM Associate degree program and will be applied as a standard for the BAS-FSLM online courses.
- Pierce College supports educational effectiveness through a district-wide assessment process. Led by the Director of Outcomes and Educational Effectiveness, faculty are provided time and space to engage in the ongoing work of continuous improvement. Each program is mapped to one of six career pathways enabling students to focus their education and enroll in courses relevant to their career interests. During the academic year, the FSLM faculty team will identify needs for any changes to instructional materials, course or program outcomes, and develop a plan of action in collaboration with the program Advisory Board.

Every three years the college conducts a self-study. Metrics for evaluation align with institutional core themes and are measured against relevant indicators of achievement. The self-study serves to identify program needs and updates from data gathered through the program mapping process, advisory board input, industry engagement, and faculty input. The self-study ensures ongoing alignment with industry standards and current practices. The process for program self-study evaluates data to include, completions, part time/full time enrollment, working students, first generation students, etc. This open-ended process ensures the BAS-FSLM degree maintains the highest level of industry relevant education in an academically prepared Fire Services workforce.

- Pierce College will leverage the mapping of FSLM pathways being conducted by the Center of Excellence for Homeland Security Emergency Management. This ongoing process will supplement available labor market data and provide a real-time approach to program quality management, data gathering, and current job information.
- Quarterly student evaluation of course content, delivery quality, and faculty effectiveness.
- Annual assessment reflection by program faculty.
- All courses are reviewed on a 3-year cycle by the Pierce College Learning Council.
- Data gathered from advisory board members, employer interviews and surveys, student course evaluations, post-graduation surveys, institutional program statistics, and cost analysis will be regularly collected to inform the Pierce College FSLM program administrative staff and the advisory board of the viability of the BAS-FSLM degree program. This process will serve as a basis for collaborative discussion between industry Fire Services professionals, educators, and BAS-FSLM program administrators. The process will be designed with the goal of validating the ongoing relevance of the BAS-FSLM degree program to employers, hiring managers, and students.

Course Preparation Needed by Students Transferring with a Technical Associate Degree

The BAS-FSLM degree is focused on advancing the education of professionals currently employed in the Fire Services sector. The degree program will prepare individuals for career advancement and promotion aligned with the National Fire Protection Association (NFPA) professional qualification standards used in certification of fire officers.

As an open door institution Pierce College seeks to provide access to as many students as possible. Transfer students, and new program applicants are given the opportunity to access the FSLM pathway leading to a BAS-FSLM degree to advance their careers as Fire Services professionals and prepare for promotional opportunities as they become available.

The BAS-FSLM admissions requirements will provide the maximum opportunity for students to accelerate their education in a positive and diverse college environment, through transfer credit, academic credit for prior learning, and work experience evaluation. FSLM related Technical Associate Degree programs that are offered through Pierce College and Washington State Fire Science programs will be evaluated to ensure articulation of the respective professional technical associate degrees to the BAS-FSLM program. Students transferring to the BAS-FSLM program with a Technical Associate Degree that does not yet have an articulation agreement in place will receive a complete evaluation of transcripts to transfer the maximum number of credits toward the BAS-FSLM degree program requirements.

Pierce College will integrate Academic Credit for Prior Learning (ACPL) as an opportunity for incoming students. The college is implementing an online tool to add structure and consistency for students, faculty and advisors through the PLA Accelerator. The PLA Accelerator is an online questionnaire that guides students through the process of documenting their work and learning experiences. The PLA Accelerator not only helps identify specific areas of knowledge and expertise, it can also enable students to self-assess their skills against the college's professional technical programs' specific learning outcomes to include the Fire Services Leadership and Management program. In this way, the PLA Accelerator adds continuity to the ACPL process and creates efficiency in the advising function by automating the PLA intake process, and providing a framework for tracking data on student engagement with PLA.

General Education Components

Pierce College provides a broad educational foundation for students and offers an array of general education courses in communication, quantitative symbolic reasoning, humanities, social science, and natural science that fulfill the fundamental areas of knowledge expected of a baccalaureate level student. The International Fire Chiefs Association has adopted minimum fire officer professional qualifications standards for use in certification of officers. The standards are comprised of essential training, education, experience, and self-development elements which are designed to prepare fire fighters for advancement into leadership, management and administrative roles within the Fire Services profession.

The BAS-FSLM program will align general education studies for the FSLM degree program with the standards recommended by the National Fire Protection Association (NFPA) education disciplines. The recommendations of NFPA align with the fundamental areas of knowledge required of a bachelor’s degree. The BAS-FSLM program will meet or exceed state guidelines for general education in applied baccalaureate degrees.⁶ To complete a BAS-FSLM degree, students must complete 10 credits in communication studies, 5 credits of quantitative/symbolic reasoning, 15 credits of humanities, 15 credits of social sciences, 15 credits of natural sciences, for a total of 60 general education credits. The proposed distribution of general education credits for the BAS-FSLM degree is represented in Table 1 below.

Table 1: General Education Courses for the BAS-FSLM degree

GER Distribution Area	Credits	Courses
Communications	10	<ul style="list-style-type: none"> • ENGL& 101 English Composition (5) • ENGL& 102 Composition II: Argumentation and Research (5) • ENGL& 235 Professional Report Writing (5)
Natural Science <i>All listed courses fulfill the Lab requirement</i>	15	<ul style="list-style-type: none"> • BIOL& 100 Biology Survey (5) • CHEM& 110 Chemical Concepts (5) • ATMOS 101 Introduction to Weather (5) • PHYS& 110 Physics for Non-Science Majors (5)
Social Science	15	<ul style="list-style-type: none"> • PSYC& 100 General Psychology (<i>Required</i>) (5) • SOC& 101 Introduction to Sociology (5) • BUS& 201 Introduction to Law (5) • ANTH& 106 The American Mosaic (5) • POLS& 202 American Government (5) <p><i>Plus one from below:</i></p> <ul style="list-style-type: none"> • ECON& 201 Microeconomics (5) • ECON& 202 Macroeconomics (5)
Humanities	15	<ul style="list-style-type: none"> • PHIL& 150 Philosophy – Intro to Ethics (5) • CMST& 220 Public Speaking (5) • CMST& 230 Small Group Communication (5)
Quantitative	5	<ul style="list-style-type: none"> • Math& 107 Math in Society (5) • Math& 146 Intro to Statistics (5)
Total General Education Credits	60	

Students complete 65 credits of lower-division core requirements for the AAS-FSLM degree, as shown in Table 2.

⁶ Washington State Board for Community and Technical Colleges, [Recommendation for Minimum General Education Requirements for Applied Baccalaureate Degrees](http://www.sbctc.edu/college/studentsvcs/RecommendationforGenEdRequirementsforBASJuly2015.pdf), <http://www.sbctc.edu/college/studentsvcs/RecommendationforGenEdRequirementsforBASJuly2015.pdf>, Sept. 2015.

Table 2: Lower Division Coursework for AAS Fire Services Leadership and Management Degree (Formerly AAS Fire Command Administration)

Course	Core Requirements (65 credits)	Credits
137	Fire Protection Systems	5
152	Building Construction	5
155	Fire Instructor I	4
180	Fire Services Administration	5
195	Fire Officer I	4
205	Safety and Survival	5
255	Fire Instructor II	3
262	Disaster Planning	4
265	Fire Officer II	4
272	Personnel Management	4
273	Principles of Emergency Services	5
274	Safety and Health for Fire Service	4
276	Fire Behavior and Combustion	5
277	Incident Safety Officer	3
286	Fire Prevention	5
	Total Core Credits	65

Coursework Needed at Junior and Senior Levels in the BAS-FSLM Program

Students will complete 55 credits of upper-division core requirements for the BAS-FSLM degree, as shown in Table 3.

Table 3: Junior and Senior Coursework for BAS-FSLM degree

Course	Core Requirements (55 credits)	Credits
300	Fire Administration	5
310	Fire Services Leadership	5
320	Political and Legal Foundations for Fire Protection	5
330	Personnel Management for the Fire Services	5
350	Fire Services Ethics	5
360	Disaster Planning and Control	5
370	Fire Related Human Behavior	5
400	Community Risk Reduction for the Fire Services	5
410	Fire Prevention Organization and Management	5
420	Fire Dynamics	5
450	Applications of Fire Research	5
CMST 330	Professional & Organizational Communication	5
	Total Core Credits	60

The sequenced and integrated nature of coursework leading to a BAS-FSLM degree led the program development team to look at the Fire Services Leadership and Management (formerly Fire Command and Administration) Associate degree in conjunction with the BAS degree to frame the design of the BAS-

FSLM pathway in a holistic and clear manner. Starting with the Associate in FSLM that is designed for Fire Services professionals seeking technical knowledge to support advancement to senior leadership positions leading to executive management positions with the Fire Services and transitioning into the BAS-FSLM program, the BAS team created a student sample schedule (Table 4) that provides an example of what a student might expect, by academic year, along with a timeline for earning degrees and being academically prepared to sit for industry certifications. This approach enabled design team members to look at the program from different student perspectives—such as freshman entering the program out of high school, an AA transfer student, or a career professional seeking credit through evaluation of prior learning, and work experience. The four year BAS-FSLM program illustration is presented in Table 4 below.

Table 4: BAS-FSLM Program 4 year Student Sample Schedule with GERs Highlighted

	Fall Quarter 1		Winter Quarter 2		Spring Quarter 3		Credentials Earned
	Course	Credits	Course	Credits	Course	Credits	
Year 1	*COLLEG 110 College Success *May be waived for students with prior college experience.	3	Math & 107 Math in Society or Math& 146 Intro to Statistics (Quantitative)	5	CMST& 220 Public Speaking or CMST& 230 Small Group Communication (Humanities)	5	
	ENGL& 101 English Composition (Communications)	5	FSLM 152 Building Construction	5	FSLM 273 Principles of Emergency Services	5	
	FSLM 137 Fire Protection Systems	5	FSLM 205 Safety and Survival	5	FSLM 180 Fire Services Administration	5	
	FSLM 277 Incident Safety Officer	3					
	Total Credits	16	Total Credits	15	Total Credits	15	Total Year 1 Credits: 46
Year 2	FSLM 155 Fire Instructor I or FSLM 195 Fire Officer I	4	PSYC& 100 General Psychology (Required) (Social Science)	5	ATMOS 101 Intro to Weather (Natural Science)	5	
	FSLM 276 Fire Behavior	5	FSLM 286 Fire Prevention	5	FSLM 274 Safety and Health	4	

	Fall Quarter 1		Winter Quarter 2		Spring Quarter 3		Credentials Earned
	Course	Credits	Course	Credits	Course	Credits	
	POLS& 202 American Government or SOC& 101 Intro to Sociology or BUS& 201 Intro to Law (Social Science)	5	FSLM 262 Disaster Planning	4	FSLM 255 Fire Instructor II or FSLM 265 Fire Officer II (4)	3	Award FSLM AAS degree (90 credits) (FSLM formerly FCA)
					FSLM 272 Personnel Management	4	
	Total Credits	14	Total Credits	14	Total Credits	16	Total Year 2 Credits: 44
					Years 1-2 Credits	90	
Year 3	FSLM 300 Fire Administration	5	PHIL& 150 Introduction to Ethics (Humanities)	5	CHEM & 110 Chemical Concepts or BIOL& 100 Survey of Biology (Natural Science w/Lab)	5	
	FSLM 310 Fire Services Leadership	5	FSLM 320 Political and Legal Foundations for Fire Protection	5	FSLM 350 Fire Services Ethics	5	
	PHYS& 110 Physics for Non- Science Majors (Natural Science w/Lab)	5	FSLM 330 Personnel Management for Fire Services	5	FSLM 360 Disaster Planning and Control	5	
	Total Credits	15	Total Credits	15	Total Credits	15	Total Year 3 Credits: 45

	Fall Quarter 1		Winter Quarter 2		Spring Quarter 3		Credentials Earned
	Course	Credits	Course	Credits	Course	Credits	
Year 4	ENGL& 235 Technical Writing or ENGL& 102 Composition II: Argumentation and Research (Communications)	5	FSLM 410 Fire Prevention Organization and Management	5	CMST 330 Professional & Organizational Communication	5	
	FSLM 370 Fire Related Human Behavior	5	FSLM 420 Fire Dynamics	5	FSLM 450 Applications of Fire Research	5	
	FSLM 400 Community Risk Reduction for the Fire Services	5	ANTH& 106 American Mosaic (Social Science)	5	ECON& 201 Microeconomics or ECON& 202 Macroeconomics (Social Science)	5	<i>Award BAS-FSLM degree (180 credits)</i>
	Total Credits	15	Total Credits	15	Total Credits	15	Total Year 4 Credits: 45
					Total Year 3-4 Credits	90	
					Total Credits Years 1/2/3/4 to earn BAS-FSLM degree	180	

Criteria 2: Qualified Faculty

All faculty and administrators in the BAS-FSLM program will meet certification requirements for professional and technical administrators and instructors as required by the Washington Administrative Code. Faculty teaching in the BAS-FSLM program will typically be required to hold as a minimum a Master's degree; exceptions may be made for highly specialized courses. In these instances, a combination of baccalaureate degree, industry experience, and industry certifications may be considered adequate. Adjunct faculty will typically be Fire and Emergency Services professionals who are working in the field. Faculty teaching general education courses within the BAS program will do so as part of regular faculty load. For 300 and 400 level general education courses we will work with Ph.D. faculty in the specific discipline to develop course content.

The college plans to hire 1 full-time director/faculty position prorated at 2/3 faculty, 1/3 administration and a full-time equivalent staff position. Administrative responsibilities will be evaluated as the program grows to ensure appropriate staffing levels are in place for faculty and program administration. Adjunct faculty with industry experience will be hired in specific technical areas.

Table 5 – Faculty Credentials

Faculty Name	Credentials	Status	Areas of Expertise
Robert Lord, MA	<ul style="list-style-type: none"> • Master of Arts, Organizational Leadership, Chapman University • Bachelor of Science, Workforce Education, Southern Illinois University 	Full-time	All FSLM
Steve North, MS	<ul style="list-style-type: none"> • Master of Science, Emergency Services Management. Columbia Southern University • Bachelor of Science, Fire Administration. Columbia Southern University • Executive Fire Officer, National Fire Academy. Emmitsburg, MD 	Adjunct	All FSLM
Ronald Powers, MS	<ul style="list-style-type: none"> • Master of Science Leadership, Embry Riddle Aeronautical University • Bachelor of Science Fire Service Administration, Eastern Oregon University 	Adjunct	All FSLM
William Zabelka, BS	<ul style="list-style-type: none"> • Master of Public Administration, University of Washington—degree expected – March of 2019 • Bachelor of Science, Public Safety Administration, Grand Canyon University 	Adjunct	Public Administration, Fire Prevention

Students are required to complete a minimum of 60 credits of general education coursework in specific areas of study. Table 6 shows the program general education courses, numbers of faculty teaching in each discipline, faculty academic credentials, as well as the minimum credentials required for all adjunct faculty. Faculty teaching upper division general education courses will hold a doctorate degree.

Table 6 - General Course Prerequisite Faculty Credentials: Pierce College

COMMUNICATION: ENGL& 101, ENGL& 102, ENGL& 235			
Tenured/Tenure Track Faculty, Full-time	14	12, MA/MFA/MS	2, Ph.D./Ed.D.
All Adjunct Faculty	Master's degree in discipline, or Master's degree in a related field, or Master's degree with 15 graduate semester credits in English		
SOCIAL SCIENCES: PSYC& 100, SOC& 101, BUS& 201, ANTH& 106, POLS& 202, ECON& 201, ECON& 202			
Tenured/Tenure Track Faculty, Full-time	5	2, SW/MA/MS	3, Ph.D./Ed.D.
All Adjunct Faculty	Master's degree in discipline, or Master's degree in a related field		
HUMANITIES: PHIL& 150, CMST& 220, CMST& 230, CMST& 330			
Tenured/Tenure Track Faculty, Full Time	3	3, MLA/MA	2, Ph.D./Ed.D.
All Adjunct Faculty	Master's degree in discipline, or Master's degree in a related field		
QUANTITATIVE/SYMBOLIC REASONING: MATH& 107, MATH& 146			
Tenured/Tenure Track Faculty, Full-time	8	8, MLA/MA	0, Ph.D./Ed.D.
All Adjunct Faculty	Master's degree in discipline, or Master's degree in a related field		
NATURAL SCIENCES: ATMOS 101, BIOL& 100, CHEM& 110, PHYS& 110			
Tenured/Tenure Tract Faculty, Fulltime	17	13, MA/MS	4, Ph.D.
All Adjunct Faculty	Master's degree in Discipline, or Master's degree in a related field, or Master's degree with 15 graduate semester credits in Earth Sciences or		

Criteria 3: Admissions Process Consistent With An Open-Door Institution

The institutional mission of Pierce College is to *create quality educational opportunities for a diverse community of learners to thrive in an evolving world*. Five core themes form the key tenants of the college's mission:

- **Access** to comprehensive and affordable educational offerings and services.
- **Student learning and success** where students will experience quality, relevant learning that increases their knowledge, skills and abilities to maximize the potential for individual success.
- **Excellence** in the quality, sustainability, and continuous improvement in all of its departments and programs ensures that graduates will be prepared and competitive in the job market.
- **Positive and diverse college environment** where quality teaching and learning are fostered, decision-making is collaborative, and students and employees feel valued and respected.
- **Contribution to the community** as a recognized leader, the District contributes to the community at large by building and maintaining academic, industry, and broad-based community partnerships to advance local educational opportunities and economic development.

In keeping with its mission, values, and core themes, Pierce College maintains an open door admissions policy that ensures equal opportunity and does not discriminate in its educational programs. No one is denied admission to the college because of race, color, national origin, sex, sexual orientation, disability or age. Admission criteria to the Bachelor of Applied Science in Fire Services Leadership and Management program is consistent with these institutional principles. Equity and inclusion metrics are being developed as part of the Achieving the Dream initiative. These metrics will be utilized to inform the BAS-FSLM marketing and outreach efforts.

Proposed Admissions Process

Consistent with an open door institution, every application that meets the college's criteria for admission will be considered for the BAS-FSLM degree program. A college level cumulative 2.5 gpa is the minimum requirement for admission to the BAS-FSLM program. Admission into the Pierce College BAS-FSLM program will be consistent with other public baccalaureate institutions. Admissions requirements are established to ensure students:

- Are academically prepared for the rigor of baccalaureate level work, and
- Have a thorough understanding of the level of personal and professional responsibility necessary to advance and succeed in the Fire Services profession, including the ability to pass any background checks and testing common to the industry.

Candidates considered for admission to the BAS-FSLM program will submit:

1. A completed Pierce College application by the published deadline accompanied by transcripts, and current non-refundable application fee as established by the college for general admission, transfer or from an articulated AA program.
2. A cover letter of personal introduction (250 – 500 words) for enrolling in the program. Include a statement outlining work experience in the industry, military service, or volunteer experience.
3. Names and contact information of 2 professional references.

A rubric with a point system will be applied when reviewing admissions applications for the BAS-FSLM program. This process will be similar to the Homeland Security Emergency Management Bachelor's degree application process.

The BAS-FSLM degree is designed as an incumbent worker focused online program to accommodate the inconsistent work schedules of fire services professionals. Those students meeting the admissions criteria will be admitted into the BAS-FSLM program.

Criteria 4: Appropriate Student Services Plan

Student support services are accessed through the easily navigable MyPierce account.

Financial Aid

Pierce College received approval from the Northwest Commission on Colleges and Universities to confer baccalaureate degrees. This designation allows the Financial Aid office to notify the U.S. Department of Education of the College's new institutional status.

BAS-FSLM students who are eligible can be awarded State Need Grant funds based on established sector amounts as determined by the Washington Student Achievement Council. Federal Student Loans will be certified based on the student's year in school. Subsidized loan limits will be extended (to 6 years) and reported to the Department of Education as required. Maximum time to degree completion as defined by the Pierce College Satisfactory Academic Progress Policy will be adjusted to reflect the program length. Financial Aid consumer information will be updated and staff will research and post any scholarship opportunities that pertain to those enrolled in the Pierce BAS-FSLM program.

To assist BAS-FSLM program students in meeting Financial Aid timelines for fall quarter awards, the application forms and the Pierce College FSLM websites will be updated with information regarding FAFSA completion deadlines. The Financial Aid office prepares and disburses federal, state, and institutional aid for all Pierce College students. Students can monitor the Financial Aid application progress online. In order to make the financial aid process as transparent and understandable as possible, students with questions about their financial aid will be assisted by the Pierce financial aid team.

Advising Services

The college fosters student autonomy by encouraging students to build professional and academic relationships with their advisors. The advising system at the college is a start to finish model that assists students as they pursue educational, career, and life goals. To ensure the communication of accurate program information, new student orientation is required for all new degree and certificate students. College 110—College Success is mandatory and results in the creation of an education plan. Once students have completed College 110 and have met certain benchmarks, professional technical students are assigned to a faculty mentor/advisor where they are expected to foster professional, academic relationships. To accomplish this, students meet with their faculty mentors quarterly via phone, online, face-to-face or using conferencing software such as Zoom.

Academic Credit for Prior Learning

The BAS-FSLM degree is focused on incumbent workers and will integrate Academic Credit for Prior Learning (ACPL) as an opportunity for incoming students. ACPL was one of the areas expressed in the comments by students as important to their decision on enrolling in a BAS-FSLM program. The Pierce Guided Pathways model creates a framework for students to seek credit for what they already know and can do related to course outcomes and skills practiced through "in-station" training. To help optimize its ACPL offerings, Pierce is implementing two online tools to add structure and consistency for students, faculty and advisors through the implementation of the *PLA Accelerator*—an online tool that guides students through the process of documenting their work and learning experiences. The PLA Accelerator not only helps identify specific areas of knowledge and expertise, it can also enable students to self-assess their skills against the college's professional technical programs' specific learning outcomes to include the Fire Services Leadership and Management program. In this way, the PLA Accelerator adds structure

and consistency to the ACPL process and creates efficiencies in the advising function by automating the PLA intake process, and providing a framework for tracking data on student engagement with ACPL. The PLA Accelerator and supporting Credit Predictor tools are expected to “go live” by spring 2019.

Admissions or student success coaches review the outcomes of the PLA Accelerator and use the results to guide an initial discussion with the student around educational goals, prior learning options, and the FSLM career pathway. Students will be directed through the online registration process and provided their quarterly registration access code (RAC). If a student indicates interest in FSLM, next steps include meeting with an FSLM faculty mentor/advisor to review the results from the PLA Accelerator and further discuss academic credit for prior learning options. The faculty role is central to evaluation of a student’s credentials and faculty advisors are responsible for final recommendations for prior learning credit.

ACPL options include:

1. **Testing**—College Level Exam Program (CLEP), Dantes Subject Standardized Test (DSST) or a Local Competency Exam.
2. Non-traditional training matched to an established **Crosswalk**. This information is captured in the PLA Accelerator. Pierce College FSLM courses will be crosswalked to various Fire Services industry certifications to include the International Fire Service Accreditation Congress (IFSAC) exams. Fire service personnel entering the BAS-FSLM program with IFSAC competency-based certificates can use the PLA Accelerator as a mechanism for presenting their IFSAC certificates for evaluation for college credit.
3. Demonstration of experience through writing a **Portfolio** that aligns college level learning with outcomes of a specific course.

A new Portfolio tool has been designed by the Pierce Center for Engagement and Learning and faculty to guide students through the portfolio design, development and evaluation process. Faculty advisors will evaluate portfolios to determine credit recommendations.

Full-time FSLM faculty provide individual advising to any student interested in the BAS-FSLM program. Advisors and faculty use the advising dashboard for tracking and record keeping. Pierce provides substantial support for students engaged in an online learning environment to include tutoring and access to a retention specialist.

The BAS-FSLM courses are in alignment with Washington State Fire Fighters Joint Apprenticeship and Training standards. This alignment presents an opportunity for Fire Fighter apprentices entering the BAS-FSLM program to present their credentials for academic credit for prior learning consideration using the PLA Accelerator.

Career Services

Faculty Advisors provide career services, resources, and strategies for making positive career choices. This includes choosing a college major and developing career plans, creating job search materials, finding internships and full-time jobs, and making successful career transitions. Resources include a computer lab, an extensive library of books, videos, and one-on-one appointments with career and employment specialists. Services are free and open to students, former students, and the general public. The Job and Career Connections department is available during normal working hours and upon request they will extend hours of service to meet the program’s needs.

The unique aspect of the BAS-FSLM degree program is the focus on advancing the career opportunities for incumbent fire service professionals through education and in-station training. As career professionals, students entering the BAS-FSLM will follow a career pathway established by the National Fire Academy aligned with Fire and Emergency Services Higher Education (FESHE) and National Fire Protection Association (NFPA) education standards.

Achieving the Dream and Starfish Student Support and Retention Tool

Pierce College is committed to student academic success and early alert systems have been documented to increase student success and retention. One of the best practices for student retention efforts is informing students early if they are exhibiting behaviors that put their academic performance at risk. Pierce College is phasing in the Starfish Student Support and Retention tool that assists faculty in helping students reach their educational goals, helps foster individual student connections with faculty, and encourages students to take early advantage of campus resources. Full implementation is anticipated by fall 2019.

Pierce College's commitment to assisting all students to achieve their educational goals resulted in joining the Achieving the Dream (ATD) National Reform Network which helps community college students succeed. ATD means improved skills, better employability, and economic growth for communities and our nation as a whole. Initiatives include College 110 designed to enhance student success and transition into college. In 2014, Pierce College was named an Achieving the Dream Leader College in recognition of retention gains and closing the achievement gap.

Counseling and Academic Support

The support services at Pierce College are extensive. All Pierce College students may access these services and FSLM faculty and staff work closely with the various departments to assist the Fire Services Leadership and Management students in their academic success.⁷ Although Pierce does not staff a medical health center, the college does employ two licensed counselors who can provide intervention and referrals as necessary. The college also offers several resources for tutoring which are free to all students. These include traditional on-site tutoring options, as well as online e-Tutoring.⁸

Library Services

Systems are in place through Pierce College libraries to provide resources that support the educational mission of the college. The BAS-FSLM program coordinator met with the Dean of Library and Learning Resources, and the Systems and Instruction librarian responsible for collections development. Library and program staff reviewed existing online database collections and the individual courses outlined in the proposed BAS curriculum framework (Table 4).

Pierce College library services has developed extensive online resources consisting of subject specific databases and class resource guides. The primary research source for the FSLM program will be the National Emergency Training Center (NETC) library. The NETC library supports the National Fire Academy and Emergency Management Institute student and faculty research, classroom lectures, and development of course materials. FSLM students will have access to the NETC's collection of more than 208,000 books, reports, audiovisual materials and indexed articles. Pierce College and the NETC library will establish an interlibrary loan agreement at no cost to the college.

A list of library materials aligned with course topics are being compiled from industry and academic practitioners to ensure industry specific peer reviewed journals, articles, and research databases are made available to support student research at the baccalaureate level. The Pierce database collections and online resources provide 24/7 access for BAS-FSLM students to study at their convenience. Examples of the extensive library research and course resources available to students can be found at <http://libguides.pierce.ctc.edu/researchguides>.

⁷ Pierce College Support Services. Web: <http://www.pierce.ctc.edu/dist/supportservices/>. Sept 2015.

⁸ Pierce College Tutoring. Web: <http://www.pierce.ctc.edu/dist/tutoring/>. Sept. 2015.

The FSLM specific resource guide for the degree program will appear similar to the existing Homeland Security Emergency Management program guide that can be viewed at <https://libguides.pierce.ctc.edu/hsem>.

Table 7 Sample of Online-Accessible Library Resources

Key Databases
<ul style="list-style-type: none"> • ProQuest Research Library or Academic Search Complete for newspaper, magazine and scholarly journal articles. • CQ Researcher or Gale Opposing Viewpoints in Context for controversial issues or current events. • Gale Virtual Reference Library for encyclopedia entries. • WOIS for career research and planning. • Films on Demand for educational videos • Ebook Central or EBSCO eBook for ebooks you can read on your computer or mobile device.
Research and Help Guides
<ul style="list-style-type: none"> • Library research guides by subject, class, or area of research need • Alphabetical list of more than 80 databases on a variety of subjects. • Find a specific article, journal, or magazine • Cite sources in MLA or APA • Finding and evaluating scholarly journals • Help connecting to library databases.

All Pierce College librarians are faculty. Librarians are available to assist program staff and faculty to ensure information literacy, a college core ability, is embedded in AA and BAS program materials. The integration of literacy components is customized for each course and aligned with course outcomes. Each instructional division has a dedicated librarian to support reading and research assignments included in the programs within the division. The division librarian will work with the BAS-FSLM faculty and students to ensure library materials are available to meet the academic rigor required for a baccalaureate degree, particularly in research methodologies with online access to resources, and increased support for research and upper division writing skills.

Computer Services

All Pierce College students have access to several open computer labs in addition to the library and WiFi access throughout most of the campus. Computer labs have extended hours. Following the FSLM associates degree online model, the core BAS-FSLM courses will be offered through CANVAS, the college system’s Learning Management System. The online model for the BAS-FSLM program opens access to courses at a time and place of convenience to the students that accommodates the inconsistent schedules of Fire Services professionals.

Access and Disability Services

Pierce College’s Access and Disability Services (ADS) staff assist those with disabilities in pursuing their educational goals. ADS staff members are committed to ensuring that Pierce College, its services, programs and activities are accessible to individuals with disabilities. Pierce College and the Fire Services Leadership and Management faculty and staff recognize that traditional methods, programs and services may need to be altered to assure full accessibility to qualified persons with disabilities who meet the minimum criteria for engaging in a professional fire command and administration course of study.

ADS is the primary focus of efforts by Pierce College to assure nondiscrimination on the basis of disability. Through ADS, qualified persons with disabilities can address their concerns regarding attitudinal or procedural barriers encountered, as well as any need for academic adjustments and/or auxiliary aids to ensure equal access. ADS also serves as a resource to the campus community in striving to make Pierce College both an accessible and hospitable place for persons with disabilities to enjoy full

and equal participation. The FSLM program faculty and staff consult with ADS staff or refer students to ADS staff whenever additional support is needed.⁹

Admissions, Registration and Records

The Registration and Records Offices offer online and in-person registration services. Additionally, staff members assist new college students with enrollment verification and official transcript requests. Both new and transfer students meet with advisors who help students register for classes after completing an application for admission and submitting the application to the Admissions Office.

Diversity and Equity

Pierce College promotes the recruitment, retention, and successful completion of educational programs for students of color through our Retention Team. Staff work to facilitate and implement success strategies for students of color to include: promoting access and student success; providing academic advising, educational planning, career exploration and student programs that support students of color; assisting with financial aid and scholarships; sponsoring leadership development activities; and the annual Students of Color Conference. Multicultural activities (Fort Steilacoom campus only) and awareness programming is conducted by the Student Programs department on each campus. More information on ethnic or multicultural student clubs can be found by contacting the campus Student Programs Department. In addition, all faculty and staff undergo ethics and diversity training annually.

Veterans' Services

Pierce College Fort Steilacoom has a Center of Excellence for Veteran Student Success. The College's aim is to increase veteran student enrollment and completion rates by:

- Providing a single point of contact to coordinate veteran student support services;
- Increasing awareness of support services;
- Reinforcing the existing support system and advocating for Veteran students;
- Expanding needed services.

Students who have served in the military are invited to visit the Veterans Resource Center at the Fort Steilacoom campus. The Center offers the following services and amenities:

- A textbook lending library;
- Computers for student use;
- Study areas;
- Opportunities to meet other Veterans and connect with both on- and off-campus services and resources;
- Access to community service providers to assist Veterans with transition to civilian life
- Peer support.

Safety

The mission of the Campus Safety Department is to provide for the safety and security of the Pierce College District, while maintaining a positive and diverse environment that promotes excellence, accountability, and respect. While every member of the college community shares responsibility for campus safety and security, the Campus Safety Department takes the lead in this area. Administrative responsibility lies with the Vice President of Administrative Services and the District Director of Safety and Security.¹⁰

⁹ Pierce College Access & Disability Services. Web: <http://www.pierce.ctc.edu/dist/supportservices/ads/>. Sept. 2015.

¹⁰ Pierce College Campus Safety. Web: <http://www.pierce.ctc.edu/studentlife/safety/>. Sept. 2015.

Criteria 5: Commitment to Build a High Quality and Sustainable Program

Pierce College is committed to developing and sustaining the Bachelor of Applied Science in Fire Services Leadership and Management. The college's commitment to growing the Fire Services pathway and meeting employer demand for a skilled workforce will be expanded from the FSLM AA/Certificate level to a BAS-FSLM degree to meet industry demand for Fire Services professionals with integrated leadership and management knowledge, skills, and competencies to practice in an evolving and dynamic profession.

Foundation of a High Quality and Sustainable Program

Pierce College was awarded the Center of Excellence for Homeland Security Emergency Management (COE) designation twelve years ago. To maintain the designation as a Center of Excellence the college was required to offer a robust, industry related degree program. The original Fire Command and Administration AA/Certificate program at the college initially fulfilled that requirement.

The college has taken a sector strategy/career pathways approach to the creation of a high quality, sustainable BAS-FSLM program by collaborating with the COE and leveraging the mapping of feeder program pathways and identification of related career fields. Among the feeder pathways into the BAS program that have been identified are the FSLM Associates program, Fire Science program graduates and incumbent workers—fire professionals currently employed in the Fire Services sector. The COE fills a role as a collaborating partner with the FSLM program informing college program staff of industry trends to validate ongoing program relevance.

A process of continuous engagement with Fire District partners on the program Advisory Board has led to the development of the BAS pathway based on industry changes, which continue to drive the need for educational pathways to a BAS-FSLM degree. The FSLM program Advisory Board has been very engaged and committed to the development of the BAS degree. They have championed the program from the beginning dating back to when the original degree was developed through a funding allocation that was awarded to the college to close gaps in access to Fire Services education. Industry encouragement has been ongoing and invaluable to the development of the BAS-FSLM program proposal. Their willingness to invest their time and professional expertise in the FSLM program has laid the foundation for the development of a BAS degree to meet the challenges of an evolving, complex Fire Services sector.

Tuition, Revenue and Local Funds

The BAS-FSLM program will be supported as a state FTE program and all revenue goes into the tuition account. Instructional funds support faculty and staff salaries as well as instructional materials, professional development, and repair of equipment. Additional tuition revenue that results from the upper division tuition rate will be utilized to cover the additional expenditures that result from proposed curriculum changes.

There are a number of factors that have led the BAS development team to feel confident with higher level enrollment projections. Primarily due to this being the only online accessible BAS-FSLM degree program in Washington State that can serve the growing demand for qualified workers.

In addition to FSLM AA graduates, target populations for recruitment include students from AA pathway Fire Science programs with outreach to fire districts to provide information for existing fire professionals around the BAS opportunity. Career professionals and transitioning military who have previous education or work experience can receive credit toward their studies through prior learning assessment and transcript evaluation. Transfer students will also receive a full evaluation of transcripts to maximize the number of credits transferred into the BAS program. The online delivery of the program enables incumbent workers with inconsistent schedules or who are mobile in their current careers access to the BAS-FSLM degree.

Table 8 Projected BAS-FSLM Revenues & Expenditures

Pierce College BAS in Fire Services Leadership and Management						
Projected Revenues and Expenditures						
		Year 1	Year 2	Year 3	Year 4	Year 5
		2019-20	2020-21	2021-22	2022-23	2024-25
	Number of Year 3 Students	20	25	30	40	40
	Number of Year 4 Students		18	23	27	36
Revenue						
	Tuition					
	Tuition Year 3 Students	\$112,440	\$143,361	\$172,033	\$229,378	\$229,378
	Tuition Year 4 Students	\$0	\$106,341	\$135,880	\$159,512	\$212,682
	Total Tuition	\$112,440	\$249,702	\$307,914	\$388,889	\$442,060
	Other Revenue					
	Consumables Fee	\$0	\$0	\$0	\$0	\$0
	Other Misc Revenue	\$0	\$0	\$0	\$0	\$0
	Total Other Revenue	\$0	\$0	\$0	\$0	\$0
	Total Revenue	\$112,440	\$249,702	\$307,914	\$388,889	\$442,060
Expenditures						
	Operating Costs					
	Adjunct Faculty Sections	\$25,824	\$59,783	\$60,978	\$85,639	\$87,352
	Staff (.5 FTE)	\$39,572	\$40,363	\$41,171	\$41,994	\$42,834
	Program Director	\$90,000	\$91,800	\$93,636	\$95,509	\$97,419
	Advising and Admittance Support (hourly)	\$20,500	\$20,910	\$21,328	\$21,755	\$22,190
	Library Support (.25)	\$12,500	\$12,750	\$13,005	\$13,265	\$13,530
	Benefits	\$61,290	\$69,565	\$72,376	\$79,529	\$82,742
	Goods and Services--Marketing	\$5,000	\$5,000	\$1,000	\$1,000	\$1,000
	Accreditation	\$5,000				
	Curriculum Development	\$10,000	\$10,000			
	Professional Development/Conferences	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
	Travel	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
	Library Material/data bases	\$5,500	\$5,500	\$5,500	\$5,500	\$5,500
	Total Operating Costs	\$281,186	\$321,671	\$314,994	\$350,191	\$358,567
	Non Operating Costs					
	Indirect Costs (10%)	\$28,119	\$32,167	\$31,499	\$35,019	\$35,857
	Total Non Operating Costs	\$28,119	\$32,167	\$31,499	\$35,019	\$35,857
	Total Expenditures	\$309,305	\$353,838	\$346,493	\$385,210	\$394,424
	Net Income (Loss)	(\$196,865)	(\$104,136)	(\$38,580)	\$3,679	\$47,636
Tuition Projections assume 2% annual Inflation, and are Operating Fee only. Used 2018-19 tuition table 1-10 credit rate (\$187.41). Program is online and designed to serve incumbent workers.						
Salary and Benefit Projections assume 2% annual inflation. Adjusted for advising support although p/t hourly position.						
Upper division sections per year: Yr1, 6; yr2, 14; yr3, 14; yr4, 20; yr5, 20						
Online program decreases need for goods and services. Department will absorb minor costs.						

Criteria 6: Program Specific Accreditation

Pierce College will seek Fire and Emergency Services Higher Education (FESHE) program certification. The BAS-FSLM degree program will replicate FESHE Professional Development model curriculum for bachelor level programs aligned with NFPA standards. Successful recognition through FESHE is obtained by meeting the following requirements.

Recognition requirements

Institutions seeking recognition must offer and require the National Fire Academy's (NFA) six-course model curriculum for the bachelor's level degree.

Required courses for the bachelor's level recognition are:

- FSLM 310 Fire Services Leadership
- FSLM 320 Political and Legal Foundations for Fire Protection
- FSLM 330 Personnel Management for Fire Services
- FSLM 400 Community Risk Reduction for the Fire Services
- FSLM 410 Fire Prevention Organization and Management
- FSLM 450 Applications for Fire Research

All courses must be offered for academic credit. Noncredit courses do not qualify for NFA recognition or certificates. Although the titles of these courses can vary from institution to institution, the NFA strongly encourages the use of its standardized titles.

Achieving FESHE Certification

The process for achieving certification involves the college sending a request, committee concurrence, and state fire training director approval. The entire process, according to National Fire Academy, is expected to be completed within 45 calendar days from the receipt of the request. Institutions receiving a Certificate of National Recognition will be listed on the FESHE college list website. An institution that desires to be a part of the recognition process must agree to the student certificate process and make its records available for random compliance audits. Students enrolled in FESHE non-core courses taken at recognized FESHE institutions are also eligible for certificates. Students must complete these courses with a passing grade and submit NFA's FEMA form 119-25-2 to receive a student certificate.

Northwest Commission Accreditation

In August 2015, Pierce College was awarded accreditation through Northwest Commission for Colleges and Universities to offer applied baccalaureate degrees. A substantive change process will take place with the addition of the BAS-FSLM.

Criteria 7: Pathway options beyond baccalaureate degree

"Today's firefighters must consider their education if they intend on moving up the ranks. The fire service has finally begun the process of picking leaders who understand the complexity of the organization, who their employer is and how that relates to the fire chief's position."¹¹

The BAS-FSLM program development team has spoken with Craig Keith, Master of Public Safety and Homeland Security Management Program Coordinator at Southern Illinois University, Carbondale about articulation of the BAS-FSLM program. Craig serves as a member of the FSLM Advisory Board and has been instrumental in advising the FSLM program developers on rigor and curriculum alignment.

¹¹ Harmes, J., Why Every Fire Officer Should Have An Advanced Degree. Fire Rescue Magazine. 1/31/08. Retrieved from the web November 18, 2018.

Articulation between the Pierce BAS-FSLM and SIU Master of Public Safety and Homeland Security Management programs is anticipated.

The proposed curriculum framework and course descriptions have been reviewed by the FSLM Advisory Board, college faculty and professionals from the Washington State Fire Chiefs Association Training Section. The Rigor/Relevance evaluation conducted on December 7, 2018 validated the student outcomes designed into FSLM courses address the rigor necessary to prepare FSLM graduates for promotional opportunities or be prepared to enroll in a Masters level program. We will continue to work closely with our 4-year partners to ensure Pierce students are not deficient in any enrollment requirements for major Master's degree programs.

Criteria 8: External expert evaluation of program

The goal of the external review is to verify credibility, design, relevance, baccalaureate rigor, and effectiveness of BAS-FSLM proposal, as well as validate consistency of the program and curriculum with current research and academic thinking. Craig Keith, Program Coordinator for the Master of Public Safety and Homeland Security Administration Program at Southern Illinois University, Carbondale and Lt. Jacob Fouts, Chair of the Washington State Fire Chiefs Association Training, Safety and Officers Section have provided feedback on the BAS-FSLM proposal based on the external evaluation rubrics published by the State Board for Community and Technical Colleges.

Evaluation 1) Craig Keith, M.A., Oklahoma State University

Evaluator Biography

Craig Keith has over 33 years of emergency work experience spanning membership in six fire agencies, and two ambulance companies serving Pierce, King, Kitsap and Thurston Counties. Craig has worked for the American Red Cross and the United States Department of Homeland Security. He trained at the National Fire Academy and taught fire services courses for Everett Community College, and Bellevue College. Craig has worked closely with the Washington State Fire Fighters Joint Apprenticeship and Training Committee, in related supplemental instruction (RSI), at Olympic College and Bates Technical College.

Craig holds associate degrees in Emergency Medical Services from Tacoma Community College and Fire Investigation from Bellevue College. He earned a Bachelor of Arts degree, in Business, from Pacific Lutheran University, and a Master's degree in Fire and Emergency Management from Oklahoma State University. Craig's current doctorate studies are at Concordia University in Portland, OR.

Craig was recently appointed program coordinator for the Bachelor of Science degree in Public Safety Management and the Master of Public Safety and Homeland Security Administration degree program at Southern Illinois University, Carbondale. SIU has a proud tradition of providing fire services educational degree programs for more than 40 years. The institution is recognized by the National Fire and Emergency Services Higher Education Program (FESHE) and is accredited by the International Fire Services Accreditation Congress (IFSAC).

Evaluator Summary (See Appendix C for full external review document)

Primary Review summary:

- The National Professional Development Model produced by the National Fire Academy under the Federal Department of Homeland Security has identified the development of fire service degree programs specifically through cooperative efforts with colleges as one of its priorities. [The BAS-FSLM program is built upon the FESHE model].

- [BAS-FSLM] Degree learning outcomes meet both appropriate standards for baccalaureate rigor and align with national models for similar programs at other schools across the nation.
- Core and elective courses do align with employer needs and demands. The upper level courses are relevant to industry and they demonstrate academic rigor.
- General Education requirements are suitable for a baccalaureate program meeting both breadth and depth requirements.
- Degree concept and learning outcomes do prepare graduates to enter graduate degree programs. As program coordinator for a graduate program in Public Safety and Homeland Security Administration, I am prepared to engage in conversations about developing a pathway for graduates of Pierce College to enter into a Master of Science degree program.
- Program faculty qualifications appear adequate to teach and continuously improve curriculum.
- [Pierce College] has a history of providing online and technical support for delivery in other programs and could be expected to provide like support for this one.
- I fully support the creation of this program. I taught in four Washington colleges at the associate degree level in fire service programs. Prior to this effort, there have been no viable options for students to take fire services courses above the 200 level in Washington.

Evaluation 2) Lt. Jacob Fouts, Accreditation Manager, Chair, Washington State Fire Chiefs Training, Safety and Officers Section. Graduate of the National Fire Academy Managing Officers Program.

Evaluator Biography

Lt. Jacob Fouts serves as the board Chairperson for the Fire Training, Safety and Officers' Section of the Washington Fire Chiefs. Lt. Fouts is a credentialed Fire Officer through the Centers for Professional Credentialing and is a graduate of the National Fire Academy Managing Officer Program.

Lt. Fouts is the Accreditation Manager for the City of Snoqualmie Fire Department in Snoqualmie, WA. In addition to being the agency Accreditation Manager, Lt. Fouts manages the department Community Risk Reduction Programs and serves as a Shift Supervisor. 2018 marks twenty-years in the fire service with three separate agencies. Lt. Fouts is an instructor at the Washington State Fire Academy and an instructor for King County Emergency Medical Services.

Evaluator Summary (See Appendix C for full external review document)

Primary Review summary:

- This program is relevant to the needs of the fire service members of the State of Washington as the Washington Fire Training, Safety, and Officers' have undertaken an effort to promote professional development that includes higher education for firefighters and fire officers throughout our profession.
- The program will lead to career advancement for those already in the profession and will lead those outside of the service to be eligible to serve in non-traditional roles.
- The program outlines, curriculum specifications, and needs justification align well with the Washington Fire Chiefs' Strategic Plan to promote higher education and professional development. The coursework allows for a degree of intensity that aligns well with the demands of the fire service profession as a whole.
- Curriculum aligns well with not only identified needs but the current makeup of executive development on the national level available through the National Fire Academy (NFA).

- The courses identified align with recognized standards for those wanting to be in positions higher than a company officer. For those that are seeking the roles laid out in the executive levels of the fire service, this program will prepare them for taking the next step to advance into the Executive Fire Officer (EFO) program at the National Fire Academy (NFA).
- The proposed BAS-FSLM program aligns well with expected outcomes for placement into the Executive Fire Officer (EFO) program at the National Fire Academy.
- The program staff identified as adjunct professors are well respected within the industry.
- Enough resources exist to support the program, including utilizing the National Fire Academy Library through inter-library loan programs.
- The program as proposed fills a need at the local level to allow for the advancement and cohort work of the professional fire officer that is seeking advancement.
- The Washington State fire service is beginning to see a lack of qualified candidates to fill executive roles in agencies as the wave of retirements from those hired in the 80's.
- This program fills a void and will grow in popularity rather quickly, creating a competitive environment to enter. This program will help retain local control and utilize candidates that have been brought up in the local systems to enhance future leaders in the Washington State Fire Service.

APPENDICES

Appendix A - BAS-FSLM Program Core Course Descriptions (Includes AA Degree Core)

The sequenced and integrated nature of coursework leading to a BAS-FSLM degree is best illustrated by showing the degree in a four year format. To show the holistic character of the program both Upper Division (BAS 300/400 level) and Lower Division (AA degree 100/200 level) courses are listed in the descriptions below.

Upper Division FSLM Courses

FSLM 300 – Fire Services Administration

This course is designed to be a progressive primer for students who want more knowledge about fire and emergency services administration. The course demonstrates the importance of the following skills that are necessary to manage and lead a fire and emergency services department through the challenges and changes of the 21st century: Persuasion and influence, accountable budgeting, anticipation of challenges and the need for change, and using specific management tools for analyzing and solving problems. A central part of the course focuses on how the leadership of a fire and emergency services department develops

FSLM 310 – Fire Services Leadership

This course examines the effective application of leadership and organizational theory in the Fire Service. Emphasis will be on understanding the psychological and social factors affecting human work behavior and performance.

FSLM 320 – Political and Legal Foundations for Fire Protection

This course examines the legal aspects of the fire service and the political and social impacts of legal issues. This course includes a review of the American legal system and an in-depth coverage of legal and political issues involving employment and personnel matters, administrative and operational matters, planning and code enforcement, and legislative and political processes with regard to the fire service.

FSLM 330 – Personnel Management for the Fire Services

This course examines relationships and issues in personnel administration and human resource development within the context of fire-related organizations, including personnel management, organizational development, productivity, recruitment and selection, performance management systems, discipline, and collective bargaining.

FSLM 350 – Fire Services Ethics

This course examines the basic principles of ethics as related to fire service operations and management with special attention given to current issues in the fire service.

FSLM 360 – Disaster Planning and Control

This course examines concepts and principles of community risk assessment, planning, and response to fires and natural and human-caused disasters, including the National Incident Management System-- Incident Command Systems (NIMS ICS), mutual aid and automatic response, training and preparedness, communications, civil disturbances, terrorist threats/incidents, hazardous materials planning, mass casualty incidents, earthquake preparedness, and disaster mitigation and recovery.

FSLM 370 – Fire Related Human Behavior

This course presents a study of human behavior in fire and other emergency situations. Students will examine current and past research on human behavior, systems models, life safety education, and building design to determine the interactions of these areas in emergency situations. Students will develop an understanding of a best-practice building life safety system as one that combines knowledge in the areas

of psychology and sociology, joined with engineering and education to produce the best possible outcomes in terms of human survivability in an emergency.

FSLM 400 – Community Risk Reduction for the Fire Services

This course provides a theoretical framework for the understanding of the ethical, sociological, organizational, political, and legal components of community risk reduction, and a methodology for the development of a comprehensive community risk-reduction plan.

FSLM 410 – Fire Prevention Organization and Management

This course empowers students with knowledge, methods, and concepts for effective leadership of comprehensive fire-prevention and risk-reduction programs.

FSLM 420 – Fire Dynamics

This course examines the underlying principles involved in structural fire protection systems and building furnishings, as well as fire protection systems, including water-based fire suppressions systems, fire alarm and detection systems, special hazard suppression systems, and smoke management systems.

FSLM 450 – Applications for Fire Research

This course examines the basic principles of research and methodology for analyzing current fire-related research. The course also provides a framework for conducting and evaluating independent research in the following areas: fire dynamics, fire test standards and codes, fire safety, fire modeling, structural fire safety, life safety, firefighter health and safety, automatic detection and suppression, transportation fire hazards, risk analysis and loss control, fire service applied research, and new trends in fire-related research.

Lower Division FSLM Courses

FSLM 137 – Fire Protection Systems

This course is designed to train participants for coordinating and disseminating information released during emergency operations and for assisting in the scheduling and coordination of news conferences and similar media events. After completing this course, the student will have met the sections required for Public Information Officer as outlined by the National Fire Protection Administration (NFPA) 1035, Standard for Professional Qualifications for Public Fire and Life Safety (2005).

FSLM 152 – Building Construction

This course provides an overview of the engineering principles of building construction, characteristics of building classifications, fire and life safety devices and assemblies, fire loading, fire resistance and flame spread ratings. Special attention will focus on construction techniques and utilization of building construction knowledge for pre-planning fire potential, meeting competency standards defined by the NFPA.

FSLM 155 – Fire Instructor I

This course is an introduction to a fire instructor's duties as written by the requirements of the National Fire Protection Agency (NFPA) 1041, Standard for Fire Service Instructor Qualifications. Students examine a basic study of elements that influence teaching and learning. Special attention is given to the Fire Service Training Instructor's relationship to student safety as well as the legal liabilities involved. Instruction will include discussion of techniques for preparing effective lessons using the psychology of learning. Other topics include: training aids, copyright law, learning theories, purposes and principles of testing and evaluation.

FSLM 180 – Fire Services Administration

This course is an introduction into relationships and issues in personnel administration within the context of fire-related organizations. Topics include human resource management, financial management, customer service, training and education, health and safety, laws and ethics.

FSLM 195 – Fire Officer I

This course is an introduction to a fire officer's duties as written by the requirements of the National Fire Protection Administration (NFPA) 1021, Standard for Fire Officer Professional Qualifications, 2003 edition. Content includes leadership, supervisory and decision making practices, legal responsibilities, communication practices, report writing, workplace safety, quality assurance and pre-incident planning.

FSLM 205 – Safety and Survival

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services

FSLM 255 – Fire Instructor II

Builds and expands on the skills learned in Fire Instructor I. This course is designed to provide the Fire Instructor with the next level of understanding for the training of personnel. This course is designed to train the participants to perform job and task analysis, develop goals and objectives, and develop a lesson plan along with the coordinating of training aids and student test and evaluation. Prepares the student for the requirements as written by the National Fire Protection Administration, (NFPA) 1041, Standard for Fire Service Instructor Qualifications (2002).

FSLM 262 - Disaster Planning

This course examines concepts and principles of community risk assessment, planning and response to fires and natural disasters, including Incident Command System (ICS), mutual aid and automatic response, training and preparedness, communications, civil disasters, earthquake preparedness, and disaster recovery.

FSLM 265 – Fire Officer II

This course is an introduction to a fire officer's duties as written by the requirements of the National Fire Protection Administration (NFPA) 1021, Standard for Fire Officer Professional Qualifications, 2003 edition. Content includes interaction with government agencies, report writing, managing human resource, RMS, budgets, performance appraisal and exposure reports.

FSLM 272 – Personnel Management

This course introduces a critical skill needed for effective management. Negotiation explores the major concepts and theories of the psychology of bargaining and negotiation, and the dynamics of interpersonal and intergroup conflict and its resolution. Content includes basic elements of conflict and negotiation, the processes of communication, persuasion, and ethical judgment, external influences on negotiations, and breakdowns in the negotiation process.

FSLM 273 – Principles of Emergency Services

This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; life safety initiatives.

FSLM 274 – Safety and Health for Fire Service

This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk evaluation and control procedures for fire stations, training sites, emergency vehicles, emergency situations involving fire, EMS, hazardous materials and technical rescue

FSLM 276 – Fire Behavior and Combustion

This course explores the theories and fundamentals of how and why fires start, spread, and are controlled.

FSLM 277 – Incident Safety Officer

This course is an introduction to the duties as written by the requirements of the National Fire Protection Association (NFPA) 1521, Standard for Fire Department Safety Officer, 2002 edition. Course elements are designed to enable the student to identify and analyze health and safety aspects relating to their role as Incident Safety Officer in both emergency and non-emergency situations.

FSLM 286 – Fire Prevention

This course provides fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; fire and life safety education; and fire investigation.

**Appendix B – BAS-FSLM Curriculum Rigor/Relevance Evaluations
Conducted by the FSLM Advisory Board on December 7, 2018**

- **FSLM 300 – Fire Services Administration**
- **FSLM 310 – Fire Services Leadership**
- **FSLM 320 – Political and Legal Foundations for Fire Protection**
- **FSLM 330 – Personnel Management for the Fire Services**
- **FSLM 350 – Fire Services Ethics**
- **FSLM 360 – Disaster Planning and Control**
- **FSLM 370 – Fire Related Human Behavior**
- **FSLM 400 – Community Risk Reduction for the Fire Services**
- **FSLM 410 – Fire Prevention Organization and Management**
- **FSLM 420 – Fire Dynamics**
- **FSLM 450 – Applications for Fire Research**

Course #: FSLM 300

Course Title: Fire Service Administration

Designer/Developer: BAS Development

Team/FESHE Courses

Student Outcomes (From Course Outline)

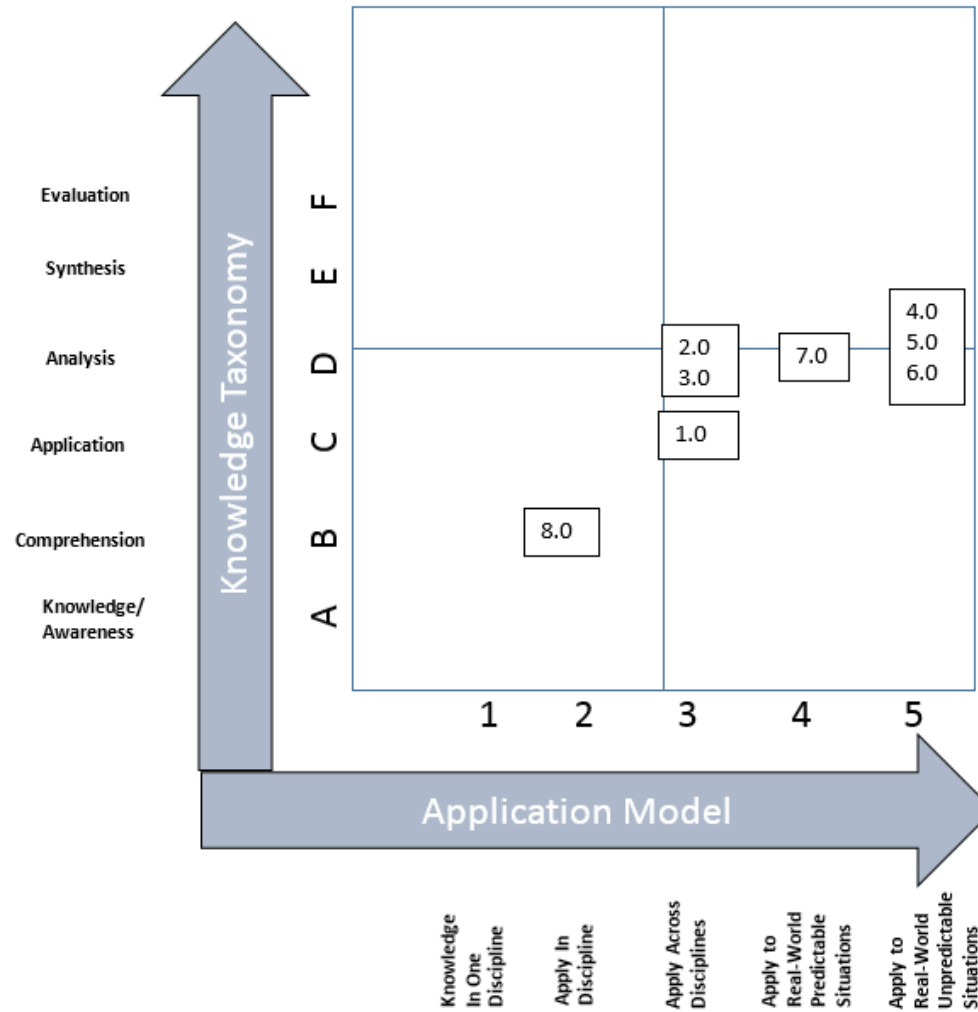
List by Outcomes Number:

1	Define and discuss the elements of effective departmental organization.
2	Classify what training and skills are needed to establish departmental organization.
3	Analyze the value of a community-related approach to risk reduction.
4	Outline the priorities of a budget-planning document, while anticipating the diverse needs of a community.
5	Assess the importance of positively influencing community leaders by demonstrating effective leadership.
6	Analyze the concept of change and the need to be aware of future trends in fire management.
7	Report on the importance of communications technology, fire service networks, and the Internet when conducting problem-solving analysis and managing trends.
8	Develop a clear understanding of the national assessment models and their respective approaches to certification.

*Recommendation: Focus on Prevention

Program Outcomes:

PO – 01 Fire Administration



Course #: FSLM 310

Course Title: Fire Service Leadership

Designer/Developer: BAS Development Team/FESHE Courses

Student Outcomes (From Course Outline)

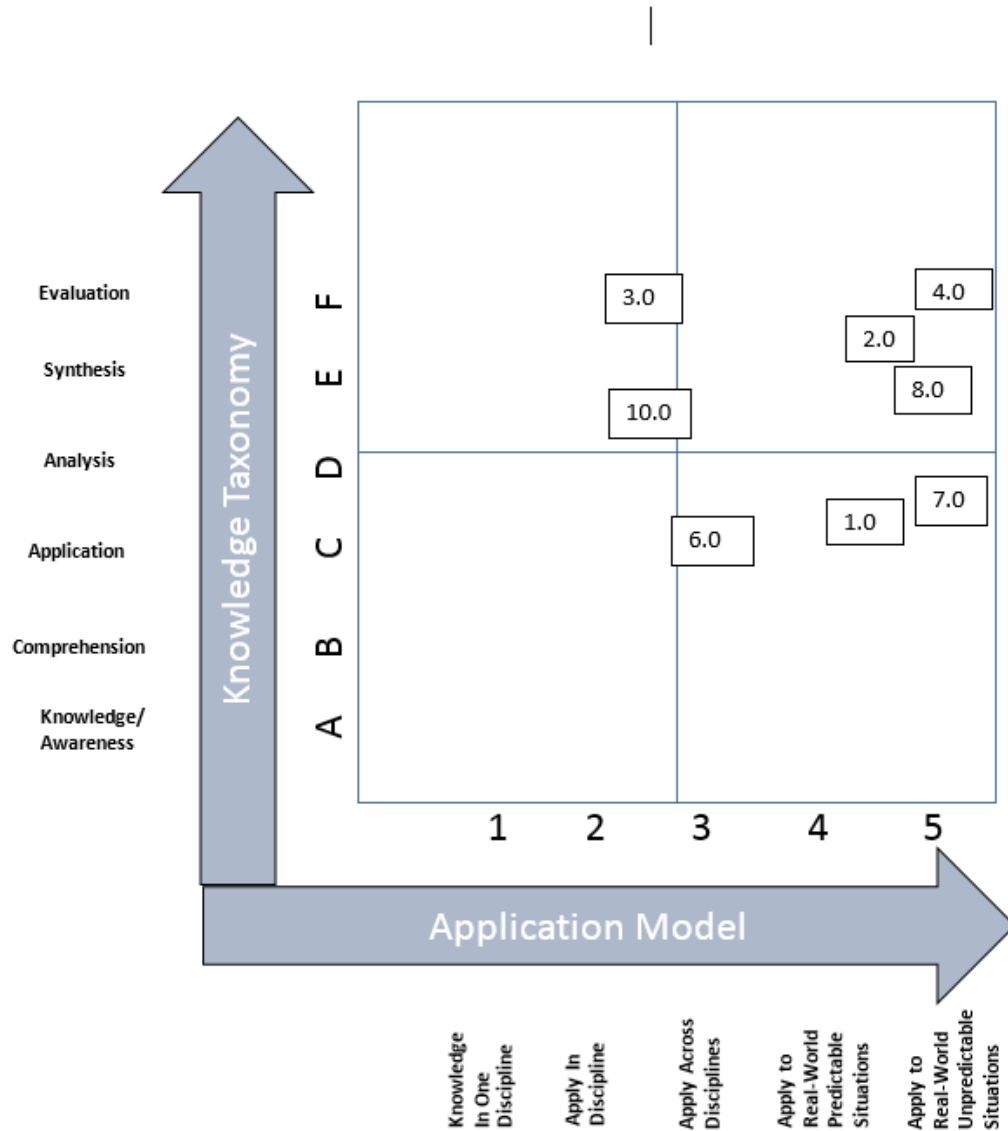
List by Outcomes Number:

1	Describe basic leadership styles and the effective use of each style given individual capabilities and situations
2	Develop and articulate one's own a personal philosophy of leadership.
3	Identify how leadership styles may be affected by crisis and non-crisis situations in the fire service.
4	Compare and contrast motivation leadership theories and describe how apply leadership theories to motivate self and others.
5*	Describe the role of situational leadership in motivating fire service personnel.
6	Describe Construct a change management model using data sets and metrics that support the process for planning, communicating, and implementing change.
7	Demonstrate a range of skills addressing conflict management, use of power, group dynamics, leadership and influence.
8	Describe causes of team dysfunction in the fire service and develop a plan to mitigate team dysfunction in t
9	Develop a plan to mitigate fire service team dysfunctions.
10	Demonstrate the application of various decision-making fire protection systems models and their application to the fire service.

*Recommendation: Delete Outcome #5

Program Outcomes:

PO – 2 Fire Service Leadership



Course #: FSLM 320

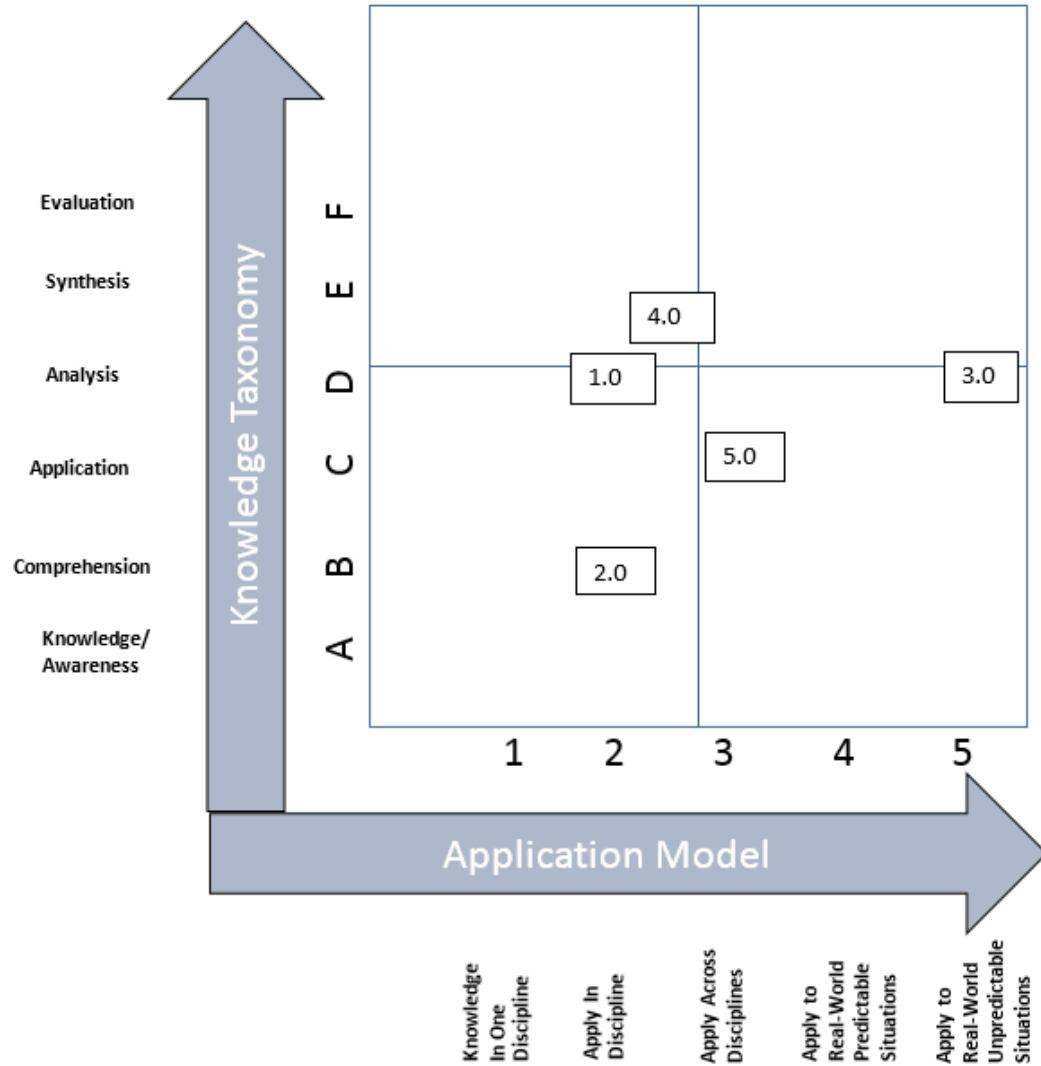
Course Title: Political & Legal Foundations for Fire Protection

Designer/Developer: BAS Development Team/FESHE Courses

Student Outcomes (From Course Outline)
List by Outcomes Number:

1.	Identify potential legal and political issues in fire and emergency services.
2.	Describe legal lessons learned from recent cases, and identify best practices in the fire service to avoid legal liability.
3.	Analyze and apply legal rules and political issues to manage risk.
4.	Formulate political and legal conclusions and recommendations based on the analysis.
5.	Locate and apply recent legal and legislative online resources.

Program Outcomes:
PO – 06 Fire Systems Legal Issues



Course #: FSLM 330

Course Title: Personnel Management for the Fire Service

Designer/Developer: BAS Development Team/FESHE Courses

Student Outcomes (From Course Outline)
List by Outcomes Number:

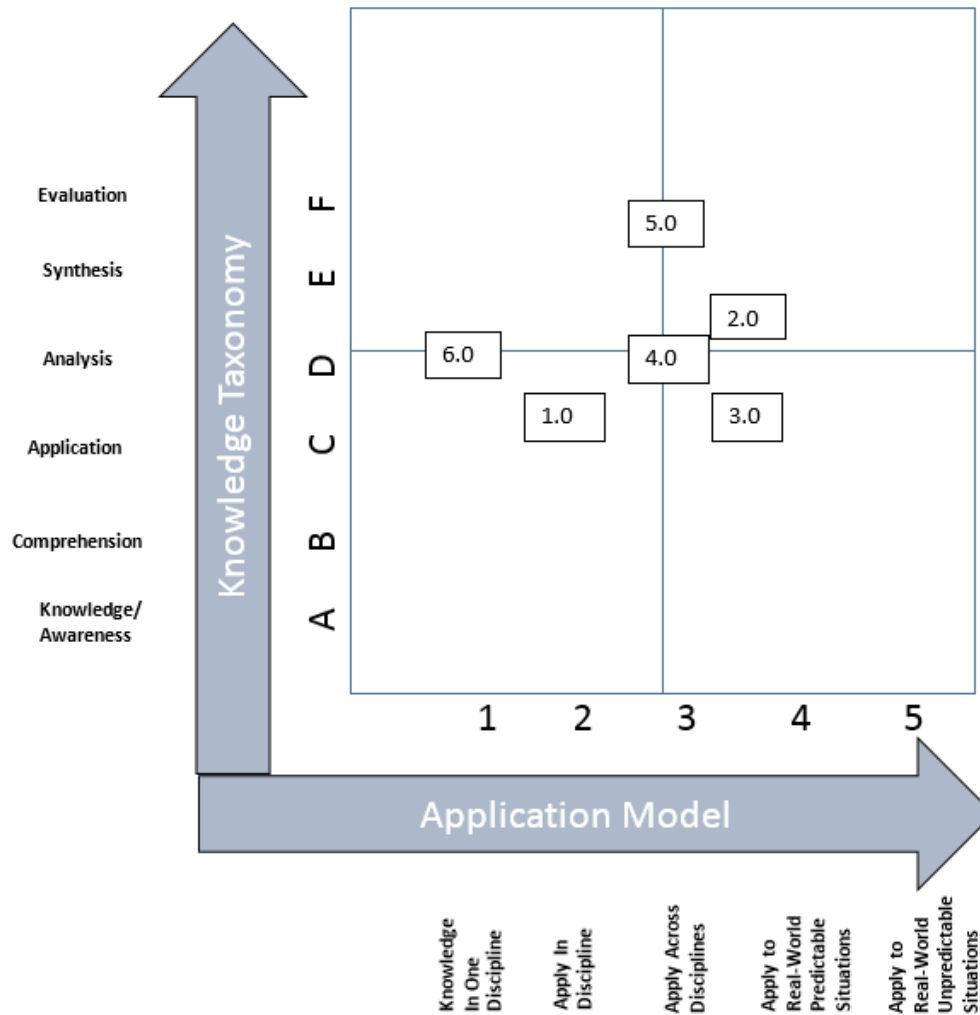
1	Identify and explain contemporary personnel management issues.
2	Explain potential personnel management issues.
3	Classify the collective rules, procedures, laws, and policies that relate to personnel management issues.
4	Analyze simple/complex personnel management issues from recruitment to selection, as well as retention.
5	Formulate recommendations and solutions to personnel management issues.
6	Explore organizational development and leadership styles and how they relate to personnel relationships

Program Outcomes:

PO – 2 Fire Service Leadership

PO – 3 Fire Service Personnel Management

PO – 5 Fire Systems Legal Issues



Course #: FSLM 350

Course Title: Fire Service Ethics

Designer/Developer: BAS Development

Team/FESHE Courses

Student Outcomes (From Course Outline)

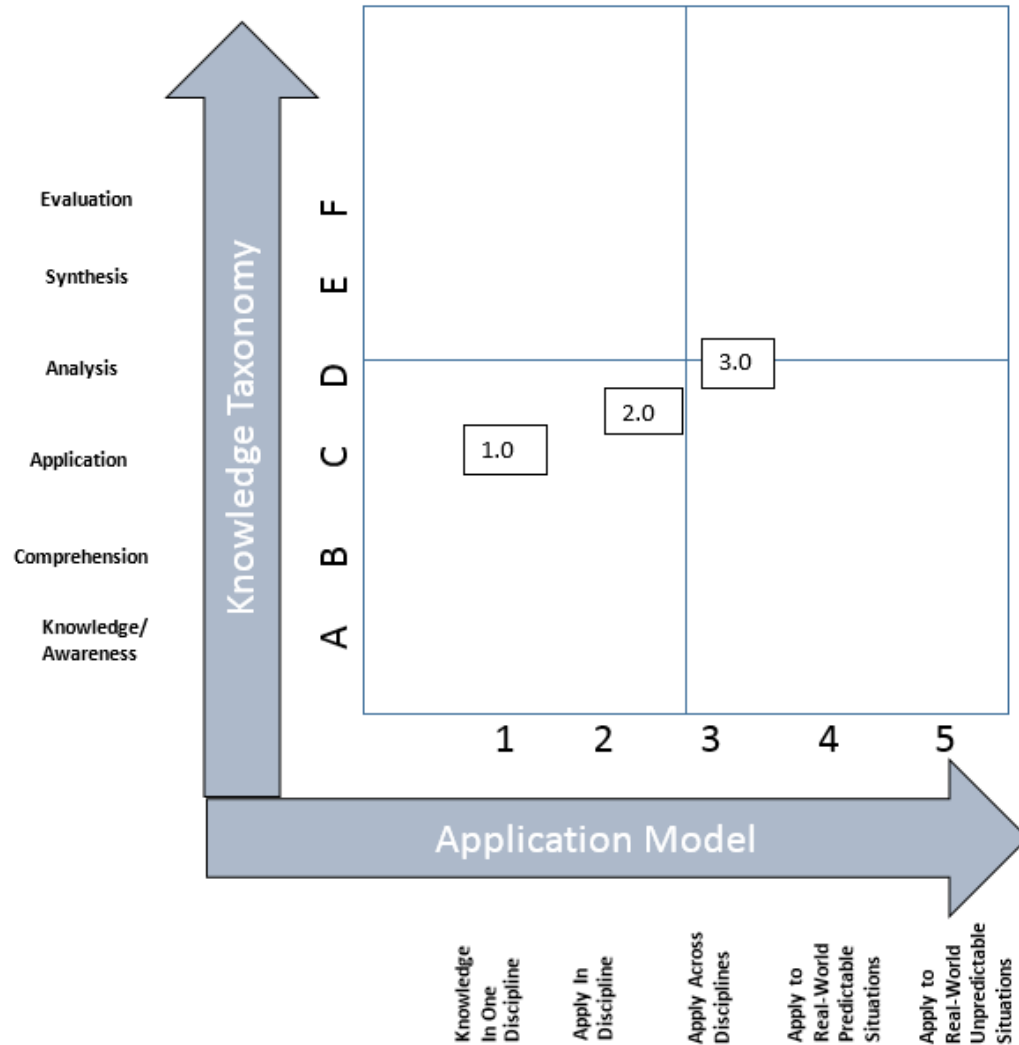
List by Outcomes Number:

1.	Develop a value statement for your department.
2.	Devise and implement an ethics training program for your department.
3.	Review and revise minority recruitment strategies.

Program Outcomes:

PO – 2 Fire Service Leadership

PO – 3 Fire Service Personnel Management



Course #: FSLM 360

Course Title: Disaster Planning & Control

Designer/Developer: BAS Development Team/FESHE Courses

Student Outcomes (From Course Outline)

List by Outcomes Number:

1.	Discuss the importance of disaster planning, preparation, and mitigation.
2.	Evaluate the hazard assessment processes and the role of the firefighter in community disaster planning and recovery.
3.	Assess hazard response and planning procedures.
4.	Define the impact of hazard occurrence on community response.
5.	Define the parameters and effectiveness of an Emergency Operations Plan (EOP) and its components.
6.	Differentiate the multilevel agency responsibilities in disaster mitigation.
7.	Define the relationships between disaster planning, mitigation, and recovery.

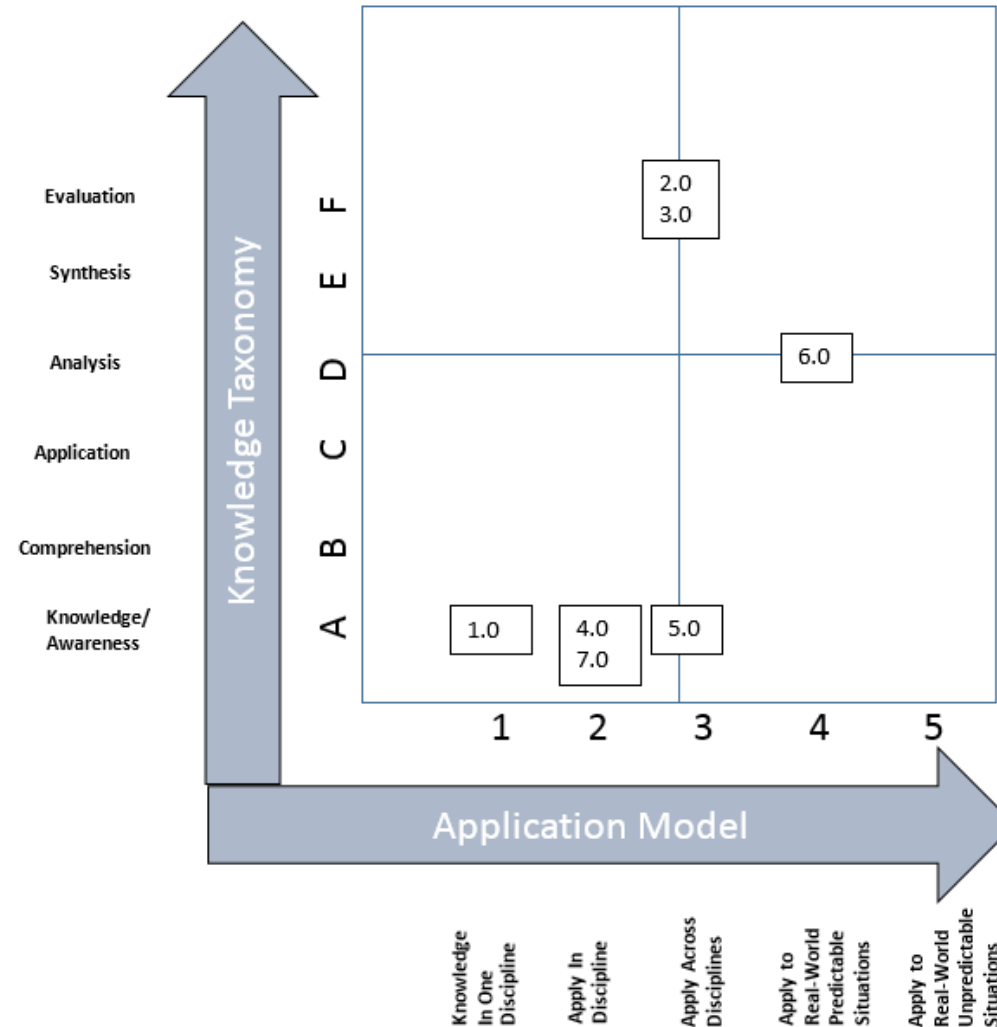
Program Outcomes:

PO – 5 Fire Systems Risk Management

PO – 2 Fire Service Leadership

*PO – 6 Fire System Legal Issues

(Assuming that legal issues addressing disaster response and community risk reduction is included in curriculum.)



Course #: FSLM 370

Course Title: Fire Related Human Behavior

Designer/Developer: BAS Development

Team/FESHE Courses

Student Outcomes (From Course Outline)

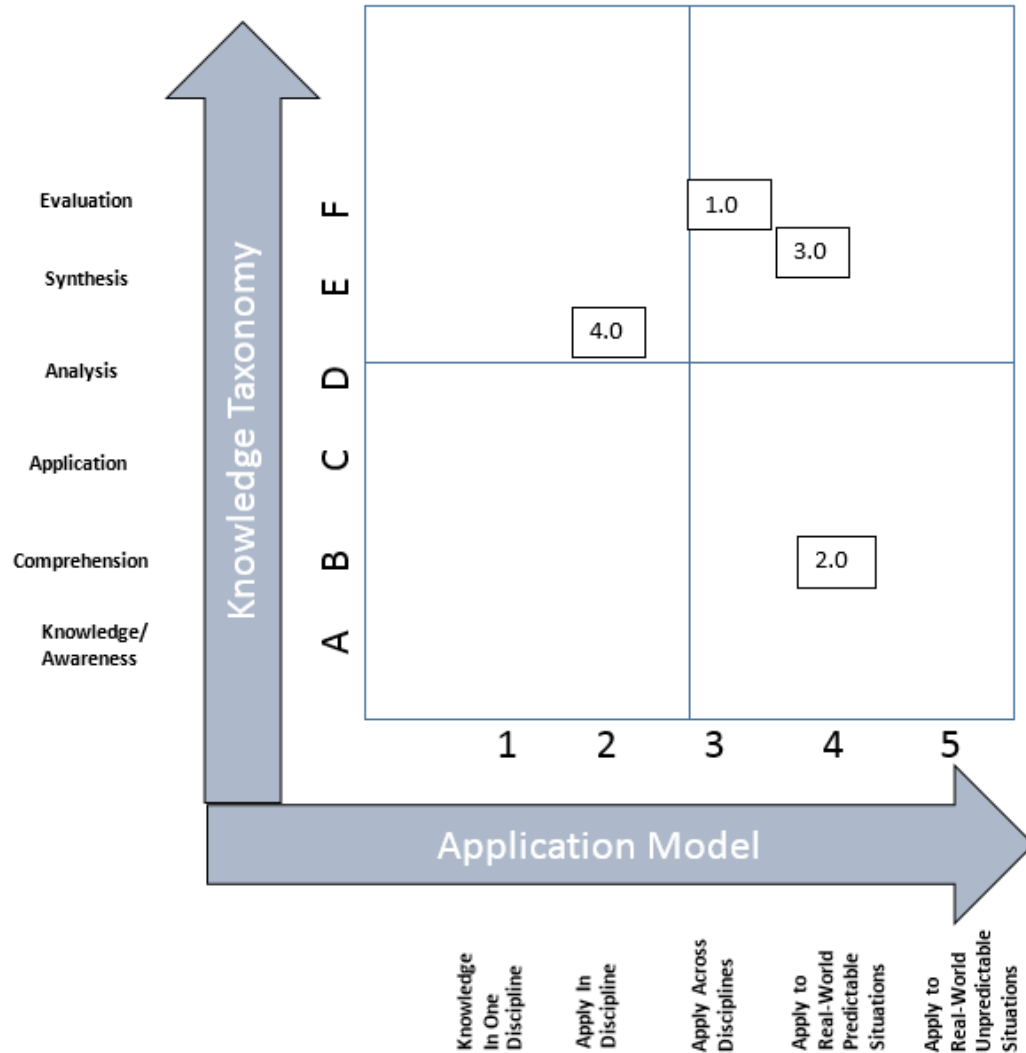
List by Outcomes Number:

1.	Apply knowledge to create a system that integrates human behavior factors into life safety planning and practice.
2.	Understand how psychology and sociology factors influence behavior.
3.	Demonstrate how current computer systems modeling functions.
4.	Locate and analyze current human-related fire research.

Program Outcomes:

PO – 1 Fire Administration

PO – 5 Fire Systems Risk Management



Course #: FSLM 400

Course Title: Community Risk Reduction For the Fire Service

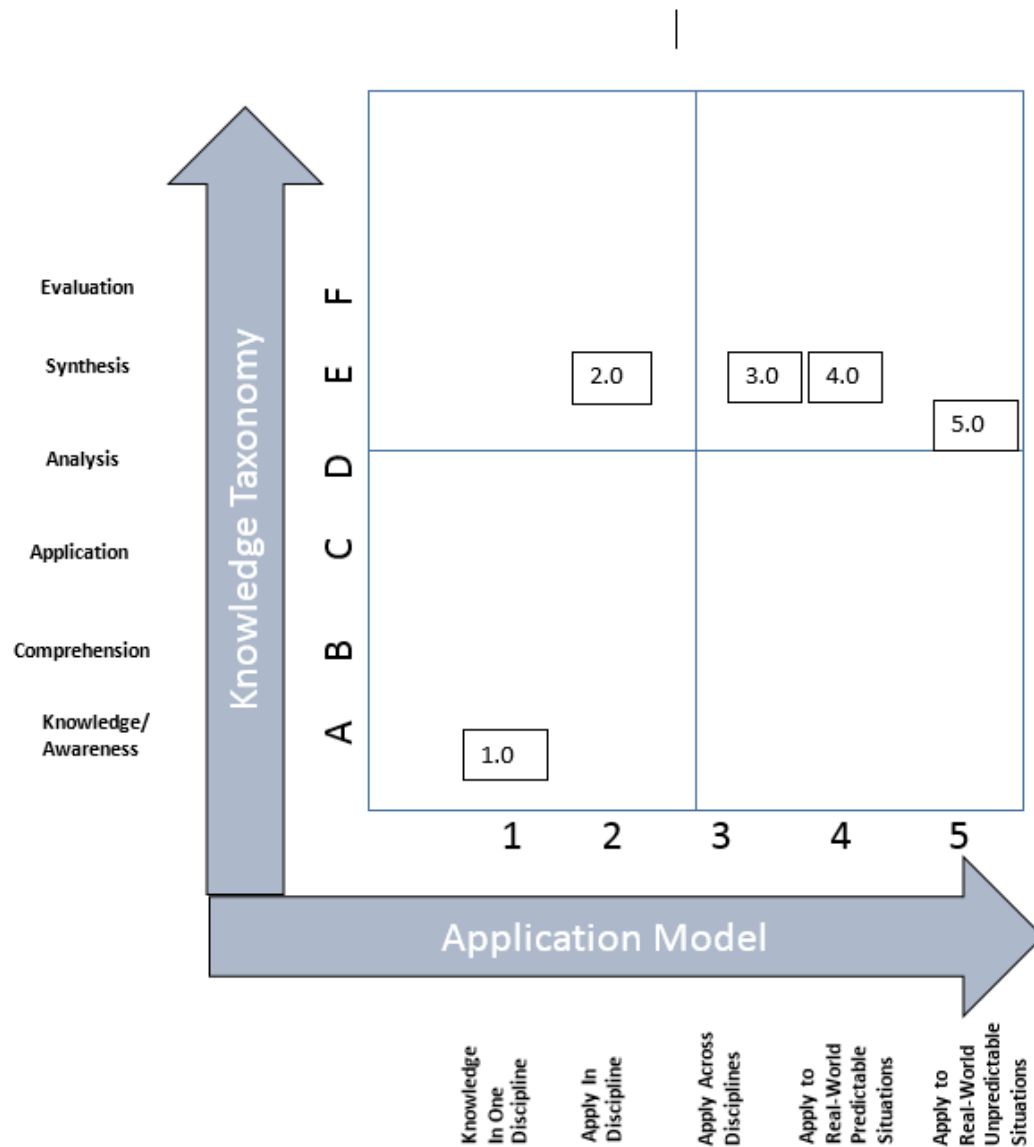
Designer/Developer: BAS Development Team/FESHE Courses

Student Outcomes (From Course Outline)
List by Outcomes Number:

1	Identify ways to become advocates of risk reduction.
2	Develop and meet community risk-reduction objectives.
3	Identify and develop intervention strategies.
4	Implement a risk-reduction program.
5	Review and modify risk-reduction programs.

Program Outcomes:

PO – 5 Fire Systems Risk Management



Course #: FSLM 410

Course Title: Fire Prevention Organization & Management

Designer/Developer: BAS Development Team/FESHE Courses

Student Outcomes (From Course Outline)
List by Outcomes Number:

1.	Explain the role of fire prevention in community risk reduction.
2.	Analyze code enforcement and plans review concepts.
3.	Analyze fire and life safety education concepts.
4.	Analyze methods for effective fire, arson, and explosion investigation
5.	Examine historical events and their influence on fire prevention.
6.	Examine social, cultural, and behavioral concepts that influence effective prevention programs.
7.	Identify and analyze local, state, and federal resources.
8.	Examine methods to enhance professional development of fire-prevention and other emergency service personnel
9.	Examine policies, procedures, and impacts of effective fire-prevention efforts.
10.	Analyze budgeting and program funding concepts.

Program Outcomes:

PO – 1 Fire Administration

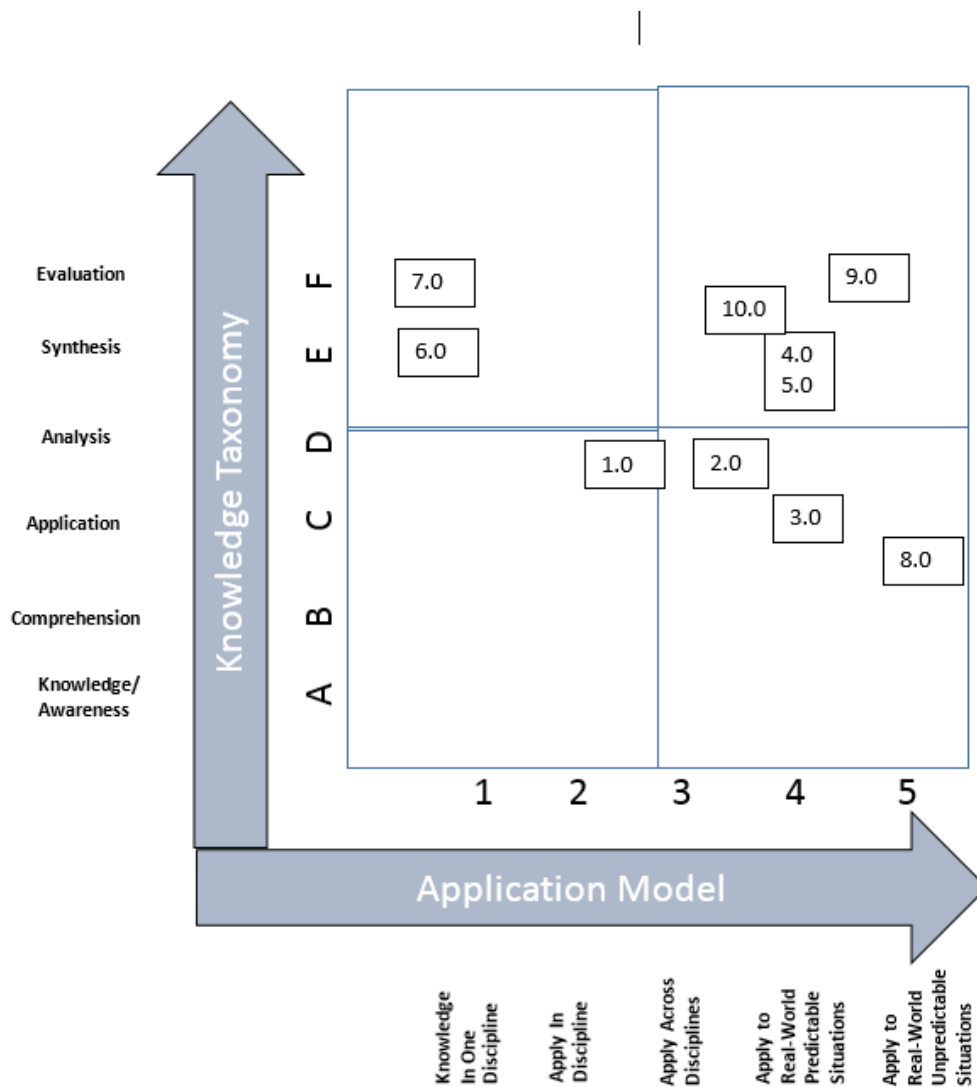
PO – 2 Fire Service Leadership

PO – 3 Fire Service Personnel Management

PO – 4 Fire Service Organizational Management

PO – 5 Fire Systems Risk Management

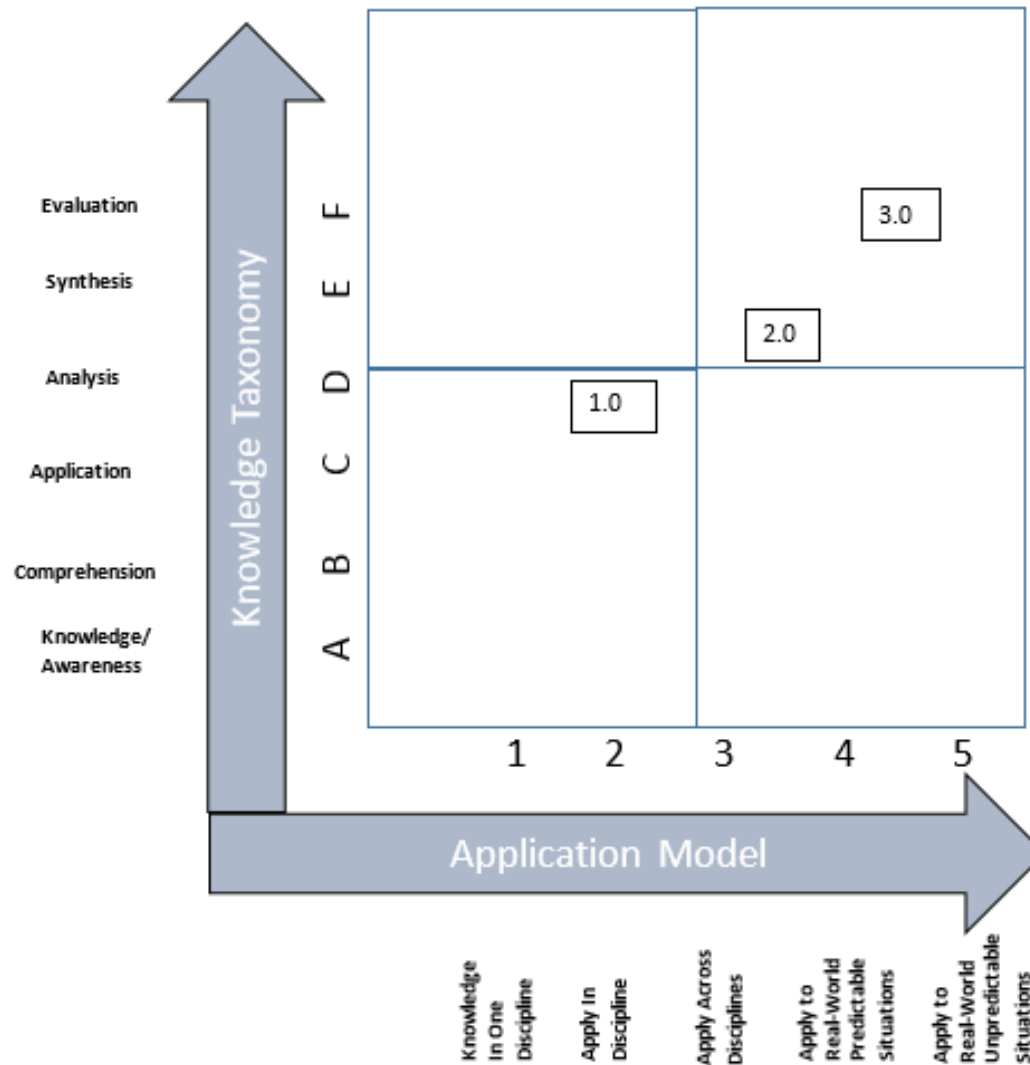
PO – 6 Fire Systems Legal Issues



Course #: FSLM 420
 Course Title: Fire Dynamics
 Designer/Developer: BAS Development Team/FESHE Courses
 Student Outcomes (From Course Outline)
 List by Outcomes Number:

1.	Analyze building structural components for fire endurance and fire resistance.
2.	Understand the flame spread and smoke production properties of building furnishings and materials.
3.	Understand the importance of, and be able to calculate, heat release rate for combustibles.

Program Outcomes:
 PO – 1 Fire Administration
 PO – 5 Fire Systems Risk Management
 PO – 7 Fire Service Research
 PO – 6 Fire Systems Legal Issues



Course #: FSLM 450

Course Title: Applications of Fire Research

Designer/Developer: BAS Development

Team/FESHE Courses

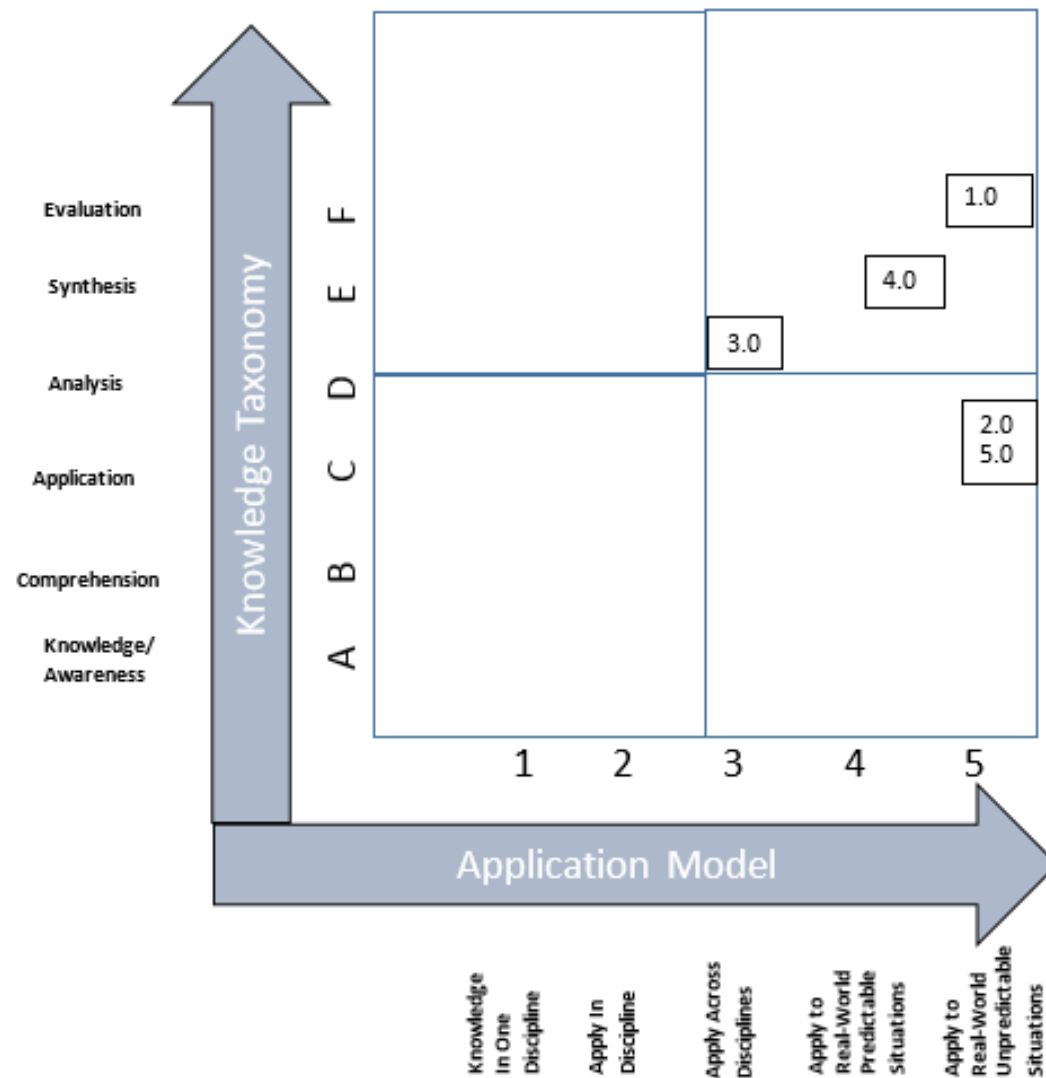
Student Outcomes (From Course Outline)

List by Outcomes Number:

1.	Locate, evaluate, and analyze fire-related research.
2.	Demonstrate the application of Demonstrate and apply the process of fire research to a problem that is related to one of the course topics.
3.	Conduct a literature review of current research on a fire-related topic.
4.	Write a fire-related research proposal.
5.	Design a research plan using one or more qualitative and/or quantitative methodologies.

Program Outcomes:

PO – 7 Fire Service Research




Appendix C – External Reviews

External Review 1 - Southern Illinois University - Carbondale

College Name: Applied Baccalaureate	Pierce College	BAS Degree Title:	Fire Services Leadership & Management
Reviewer Name	Craig L. Keith	Institutional or Professional Affiliation:	Southern Illinois University-Carbondale, Program Coordinator Master of Public Safety and Homeland Security Administration Program
Professional License or Qualification, if any:	<p>Firefighter I, II, Hazmat Ops, Instructor I, Fire Officer I</p> <p>Commercial Class-A driver license with combination, air brake, hazardous materials, tanker and passenger vehicle endorsements</p> <p>Emergency Medical Technician - Emergency Vehicle Incident Prevention</p> <p>(Past Certifications) - Emergency Medical Technician, Paramedic</p> <p>Association of State Floodplain Managers, Floodplain Manager</p> <p>College Instructor, Everett Community College, Bellevue College, Olympic College – Associate faculty</p>	Relationship to Program, if any:	Advisory Board member – Fire Command and Administration (AAS) Degree Program
Please evaluate the following Specific Elements			
Concept and overview	Is the overall concept of the degree program relevant and appropriate to current employer demands as well as to accepted academic standards? Will the program lead to job placement?		
	The National Professional Development Model produced by the National Fire Academy under the Federal Department of Homeland Security has identified the development of fire service degree programs specifically through cooperative efforts with colleges as one of its priorities. According to the Bureau of Labor Statistics job growth for fire service and other emergency service providers is expected to be between 7 and 15 percent over the next decade; an industry growing at as high as double the rate of other professions.		

Degree Learning Outcomes	Do the degree learning outcomes demonstrate appropriate baccalaureate degree rigor?
	Degree learning outcomes meet both appropriate standards for baccalaureate rigor and align with national models for similar programs at other schools across the nation.
Curriculum Alignment	Does the curriculum align with the program’s Statement of Needs Document?
	YES
Academic Relevance and Rigor	Do the core and elective courses align with employer needs and demands? Are the upper level courses, in particular, relevant to industry? Do the upper level courses demonstrate standard academic rigor for baccalaureate degrees?
	Core and elective courses do align with employer needs and demands. The upper level courses are relevant to industry and they demonstrate academic rigor.
General Education Requirements	Are the general education requirements suitable for a baccalaureate level program? Do the general education courses meet breadth and depth requirements?
	General Education requirements are suitable for a baccalaureate program meeting both breadth and depth requirements.
Preparation for Graduate Program Acceptance	Do the degree concept, learning outcomes and curriculum prepare graduates to enter and undertake suitable graduate degree programs?
	Degree concept and learning outcomes do prepare graduates to enter graduate degree programs. As program coordinator for a graduate program in Public Safety and Homeland Security Administration, I am prepared to engage in conversations about developing a pathway for graduates of Pierce College to enter into a Master of Science degree program.
Faculty	Do program faculty qualifications appear adequate to teach and continuously improve the curriculum?
	Program faculty qualifications appear adequate to teach and continuously improve curriculum. I am personally aware of dozens of additional qualified instructors in similar programs that could also be recruited in an applicant pool to fill any future needs for teaching expertise in the program.

Resources	Does the college demonstrate adequate resources to sustain and advance the program, including those necessary to support student and library services as well as facilities?
	The college has the resources to sustain and advance this program. They have a history of providing online and technical support for delivery in other programs and could be expected to provide like support for this one.
Membership and Advisory Committee	Has the program received approval from an Advisory Committee? Has the program responded appropriately to it Advisory Committee’s recommendations?
	Yes
Overall assessment and recommendations	Please summarize your overall assessment of the program.
	<p>I fully support the creation of this program. I taught in four Washington colleges at the associate degree level in fire service programs. Prior to this effort, there have been no viable options for students to take fire service courses above 200 level courses in Washington. As a Washington State Fire Service professional, I earned two technical degrees, in Washington, one at Tacoma Community College and one at Bellevue College. In my 33 years working in the greater Puget Sound area, I am not aware of another opportunity for fire service professionals, in Washington State, to seek Baccalaureate level course work at an institution of higher learning based in Washington State.</p> <p>This program uses as its base, the curriculum developed by a group of fire service professionals and educators that have been working for more than two decades to develop model curriculum standards for like programs. I have personally attended some of these curriculum development meetings.</p>
Reviewer Bio or Resume  Public Safety Management Progræ	

January 31, 2019

Jamie Krause
Robert Lord
Pierce College Fort Steilacoom Campus
9401 Farwest Drive SW
Lakewood, WA 98498
jkrause@pierce.ctc.edu
rlord@pierce.ctc.edu

Dear Jamie Krause:

The purpose of this letter is to lend my personal and professional support to you and members of the advisory board in developing the Fire Services Leadership and Management Baccalaureate Degree program at Pierce College. Emergency services personnel accumulate an array of training certificates and miscellaneous college transcripts filled with courses that duplicate efforts without a clear path to an educational objective. This program can fill a need, in the State of Washington, by providing an educational path that is currently not available to emergency services providers that work odd and unpredictable hours when the need for their services demands their undivided attention.

I once wrote an essay highlighting the need to develop people capable of delivering high-quality emergency services to local communities. I was inspired by the writings of James O. Page (1986), fire chief, attorney, publisher and technical advisor to the television series “Emergency”. Page demanded excellence and understood compassion. He was characteristically resistant to equilibrium; never content to rest on previous achievements. I resolved to become an advocate for the purposeful habit of professional development which is described by Dr. Denis Onieal, Deputy U.S. Fire Administrator and former Superintendent at the National Fire Academy as a planned, progressive life-long endeavor; a journey, not a destination. The process contains four distinct elements: Training, education, experience, and continuing education. Training and education are often used interchangeably, but they have different meanings. Training is primarily about transferring technical skills. Proficiency may be demonstrated by an evaluation process that might be recognized by the issuance of a certificate. Education includes the acquisition of knowledge, usually through academic means, typically through accredited colleges and universities issuing a diploma. Education challenges students to develop deeper cognitive understanding exploring the *what* and the *why*, and the historical and social context of the subject matter. Experience is a practical contact, an encounter or an observation of facts and events particularly when those events shape one’s perception or predictions of the outcome of a future scenario. Continuing education is the process of adding enhancing and engaging in dialogue that serves to strengthen the knowledge base of participants.

Traditional emergency services providers excel at providing to their members *training, experience and continuing education*. They lack the ability to deliver the *educational* component provided by colleges and universities. Traditional colleges required students to adhere to rigid schedules, in a seated

environment, not suited for students with rotating shift schedules. The Fire Services Leadership and Management Baccalaureate proposal, has the potential to develop the educational component of an individual's professional development plan by providing a stimulating and intellectual challenge while remaining flexible enough to schedule around students' work shift schedules.

My experiences, training and education have prepared me to weigh in on this conversation. I have over 33 years of emergency work experience spanning membership in six fire agencies, and two ambulance companies serving Pierce, King, Kitsap and Thurston Counties. I also worked for the American Red Cross and the United States Department of Homeland Security. I trained at the National Fire Academy. I taught fire services courses for Everett Community College, and Bellevue College. And, I worked closely with the Washington State Fire Fighters Joint Apprenticeship and Training Committee, in related supplemental instruction (RSI), at Olympic College and Bates Technical College.

I earned an associate degree in emergency medical services from Tacoma Community College and an associate degree in Fire Investigation from Bellevue College. I hold a Bachelor of Arts degree, in Business, from Pacific Lutheran University, and a master's degree in Fire and Emergency Management from Oklahoma State University. My doctorate studies are at Concordia University in Portland, OR.

I was recently appointed program coordinator for the Bachelor of Science degree in public safety management and the Master of Public Safety and Homeland Security Administration degree program at Southern Illinois University. SIU has a proud tradition of providing fire services educational degree programs for more than 40 years. The institution is recognized by the National Fire and Emergency Services Higher Education Program and accredited by the International Fire Services Accreditation Congress. We have over 30 instructors that teach courses very much like those proposed in the Pierce College program that may be called upon as resources for curriculum development or as a potential labor force for additional adjunct faculty. In addition, we are prepared to engage in conversations that have the potential to lead to articulation agreements and pathways to our graduate program.

Sincerely,



Craig L. Keith

Public Safety Management Coordinator

Quigley Hall - Mail Code 4337

875 South Normal Ave

Carbondale, IL 63901

Office 618 453 7277

Cell 206 372 3524

External Review 2 - Washington State Fire Chiefs Association – Training, Safety and Officers’ Section

College Name:	Pierce College	BAS Degree Title:	Fire Services Leadership and Management
Reviewer Name/ Team Name:	Lt. Jacob Fouts Accreditation Manager Washington Fire Training, Safety, and Officers’ (Section of the Washington Fire Chiefs Association)	Institutional or Professional Affiliation:	City of Snoqualmie Fire Department
Professional License or Qualification, if any:	Accreditation Manager, Fire Officer, Managing Officer	Relationship to Program, if any:	External Reviewer
Please evaluate the following Specific Elements			
Concept and overview	Is the overall concept of the degree program relevant and appropriate to current employer demands as well as to accepted academic standards? Will the program lead to job placement?		
	<p>Comment <i>The degree program being requested falls in line with degree programs being offered out of state. This program is relevant to the needs of the fire service members of the State of Washington as the Washington Fire Chiefs (WFC) and the Washington Fire Training, Safety, and Officers’ (WFTSO) have undertaken an effort to promote professional development that includes higher education for firefighters and fire officers throughout our profession.</i></p> <p><i>The program will lead to career advancement for those already in the profession and will lead those outside of the service to be eligible to serve in non-traditional roles.</i></p>		
Degree Learning Outcomes	Do the degree learning outcomes demonstrate appropriate baccalaureate degree rigor?		
	<p>Comment <i>The learning outcomes clearly identify the need for a program to be held within the state. The program outlines, curriculum specifications, and needs justification align well with the Washington Fire Chiefs’ Strategic Plan to promote higher education and professional development. The coursework allows for a degree of intensity that aligns well with the demands of the fire service profession as a whole.</i></p>		

Curriculum Alignment	<p>Does the curriculum align with the program’s Statement of Needs Document?</p> <p>Comment <i>Curriculum aligns well with not only identified needs but the current makeup of executive development on the national level available through the National Fire Academy (NFA). The NFA utilizes the Fire and Emergency Services Higher Education (FESHE) model with American Council on Education (ACE) recommendations. This program aligns well.</i></p>
Academic Relevance and Rigor	<p>Do the core and elective courses align with employer needs and demands? Are the upper level courses, in particular, relevant to industry? Do the upper level courses demonstrate standard academic rigor for baccalaureate degrees?</p> <p>Comment <i>The courses identified align with recognized standards for those wanting to be in positions higher than a company officer. For those that are seeking the roles laid out in the executive levels of the fire service, this program will prepare them for taking the next step into advancing into the Executive Fire Officer (EFO) program at the National Fire Academy (NFA).</i></p>
General Education Requirements	<p>Are the general education requirements suitable for a baccalaureate level program? Do the general education courses meet breadth and depth requirements?</p> <p>Comment <i>General Education requirements seem suitable when compared with other programs.</i></p>
Preparation for Graduate Program Acceptance	<p>Do the degree concept, learning outcomes and curriculum prepare graduates to enter and undertake suitable graduate degree programs?</p> <p>Comment <i>The programs being proposed align well with expected outcomes for placement into the Executive Fire Officer (EFO) program at the NFA. The EFO program aligns with graduate work to include extensive research and culminating dissertation.</i></p>
Faculty	<p>Do program faculty qualifications appear adequate to teach and continuously improve the curriculum?</p> <p>Comment <i>Per the program outline this seems sufficient. The program staff identified as adjunct professors are well respected within the industry.</i></p>

Resources	<p>Does the college demonstrate adequate resources to sustain and advance the program, including those necessary to support student and library services as well as facilities?</p> <p>Comment <i>With the program being proposed to be an online only program, enough resources exist to support the program, including utilizing the National Fire Academy Library through inter-library loan programs. Established online platforms meet the needs to provide cohort communities to engage discussion and real-world thought.</i></p>
Membership and Advisory Committee	<p>Has the program received approval from an Advisory Committee? Has the program responded appropriately to it Advisory Committee's recommendations?</p> <p>Comment <i>To the best of my knowledge, the program has received unanimous approval.</i></p>
Overall assessment and recommendations	<p>Please summarize your overall assessment of the program.</p> <p>Comment <i>The program as proposed fills a need at the local level to allow for the advancement and cohort work of the professional fire officer that is seeking advancement. The Washington State fire service is beginning to see a lack of qualified candidates to fill executive roles in agencies as the wave of retirements from those hired in the 80's crashes on the shores. With agencies requiring certain minimum education requirements, many are having to look outside of the state where others have been receiving this education for years. This program fills a void and will grow in popularity rather quickly, creating a competitive environment to enter. This program will help retain local control and utilize candidates that have been brought up in the local systems to enhance future leaders in the Washington State Fire Service.</i></p>
<p>Reviewer Bio or Resume <i>Lt. Jake Fouts is the Accreditation Manager for the City of Snoqualmie Fire Department in Snoqualmie, WA. In addition to being the agency Accreditation Manager, Lt. Fouts manages the department Community Risk Reduction Programs and serves as a Shift Supervisor. 2018 marks twenty-years in the fire service with three separate agencies. Lt. Fouts is an instructor at the Washington State Fire Academy, instructor for King County Emergency Medical Services, and also serves as the board Chairperson for the Fire Training, Safety and Officers' Section of the Washington Fire Chiefs. Lt. Fouts is also a credentialed Fire Officer through the Centers for Professional Credentialing and is a graduate of the National Fire Academy Managing Officer Program.</i></p>	

Appendix D – Fire Services Leadership and Management Advisory Board

Name	Affiliation	Email	Phone
Jay Summerlin	Battalion Chief, West Pierce Fire & Rescue Representing the WS Fire Chiefs – Training Officers	Jay.sumerlin@wetpierce.org	253-983-4546
Eric Norton	Assistant Chief, West Pierce Fire & Rescue	Eric.Norton@westpierce.org	253-983-4546
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Mark Correira	Fire Chief, City of Snoqualmie Fire Department 37600 SE Snoqualmie Parkway Snoqualmie, WA 98065	mcorreira@ci.snoqualmie.wa.us	425-754-5467
Russ Kaleiwahea	Fire Chief, West Thurston Regional Fire Authority 10828 Littlerock Rd. SW Olympia WA 98512	russ.kaleiwahea@westthurstonfire.org	360-352-1614
Steve North	Fire Chief, McLane Black Lake Fire Department 125 Delphi Rd NW Olympia, WA. 98502	SNorth@pierce.ctc.edu	

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