# Continuous Improvement Plan

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Name of Program/Unit: Fire Science

CIICC

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# Table 1: CIP Outcomes, Measures & Targets Table (focus on at least one for the next two years)

<b>A. Expected Outcome(s)</b> Results expected in this unit (e.g. Authorization requests will be completed more quickly; Increase client satisfaction with our services)	<b>B. Measure(s)</b> Instrument(s)/process(es) used to measure results (e.g. survey results, exam questions, etc.) Include Course Information and Semester in which assessment will occur	<b>C. Target(s)</b> Level of success expected (e.g. 80% approval rating, 10 day faster request turn- around time, etc.)
<ol> <li>Perform an annual service test on fire hose, given a pump, a marking device, pressure gauges, a timer, record sheets, and related equipment, so that procedures are followed, the condition of the hose is evaluated, and damaged hose is removed from service, and the results are recorded.</li> </ol>	Course exams	Minimum score of 70% on specific questions related to the expected outcome
2. Assume and transfer command within an incident management system.	Course exams, skill instructor observations	Minimum score of 70% on specific questions related to the expected outcome

<ol> <li>Assemble course materials, given a specific topic, so that the lesson plan and all materials, resources, and equipment needed to deliver the lesson are obtained.</li> </ol>		Minimum score of 70% on specific questions related to the expected outcome
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# **Description of Fields in the Following CIP Tables:**

A. Outcome(s) - Results expected in this program (e.g. Students will learn how to compare/contrast conflict and structural functional theories; increase student retention in Nursing Program).

- B. Measure(s) Instrument(s)/process(es) used to measure results
- (e.g. results of surveys, test item questions 6 & 7 from final exam, end of term retention rates, etc.)
- C. Target(s) Degree of success expected (e.g. 80% approval rating, 25 graduates per year, increase retention by 2% etc.).
- D. Action Plan Based on analysis, identify actions to be taken to accomplish outcome. What will you do?
- E. Results Summary Summarize the information and data collected in year 1.
- F. Findings Explain how the information and data has impacted the expected outcome and program success.
- **G. Implementation of Findings** Describe how you have used or will use your findings and analysis of the data to make improvements.

# Table 2. CIP Outcomes (FOCUS ON AT LEAST 1)

<b>B. Measure (Outcome #1)</b> Course exams	C. Target (Outcome #1) Minimum score of 70% on specific questions related to the expected outcome		
<ul> <li>D. Action Plan (Outcome #1)</li> <li>Utilize questions from publisher test banks to increase the number of exam questions related to this learning outcome by 50%.</li> <li>E. Results Summary (Outcome #1)</li> </ul>			

### G. Implementation of Findings

Since performance measure was not met, it is believed that part of the problem is the age of the fire apparatus used in training. Two of the three fire engines used in the program are 20 years old. Modern day pumpers utilize more technology that is not found on the older vehicles.

### A. Outcome #2 – Basic Firefighter

Demonstrate methods and procedures for safe and effective pump operations of fire department apparatus Assemble course materials, given a specific topic, so that the lesson plan and all materials, resources, and equipment needed to deliver the lesson are obtained.

B. Measure (Outcome #2)	C. Target (Outcome #2)
Course exams, skill instructor observations	Minimum score of 70% on specific questions related to the expected
	outcome

# D. Action Plan (Outcome #2)

Utilize questions from publisher test banks to increase the number of exam questions related to this learning outcome by 50%.

# E. Results Summary (Outcome #2)

Pass rate 65%.

### F. Findings (Outcome #1)

Knowledge: Improvement, but not met Performance: Not met

# G. Implementation of Findings

While some improvement is noted on exam score results, students are confused when working the pump controls on the various fire engines used in the program. The operator's pump panel on the newer fire engines are different than older models. Another issue is lack of documentation for student skill performance during pumping operations. During the next fact-finding period, skill instructors will have a check sheet to record actual skill performance.

### A. Outcome #3 – Fire Officer

Assemble course materials, given a specific topic, so that the lesson plan and all materials, resources, and equipment needed to deliver the lesson are obtained.

B. Measure (Outcome #1)	C. Target (Outcome #1)
Course exams	Minimum score of 70% on specific questions related to the expected
	outcome
D. Action Plan (Outcome #1)	

Increase the number of exam questions related to this learning outcome by 50%.

### E. Results Summary (Outcome #1)

Pass rates: 29.17%, 43.75%

### F. Findings (Outcome #1)

Knowledge: Not met

# G. Implementation of Findings

Since performance measure was not met, it is believed that part of the problem is the lack of information under "assemble materials..." in the textbook. The book devotes only 12 pages to cover all of the topics associated with this learning outcome. The corresponding national standard for this learning outcome references materials, equipment and resources available to the authority having jurisdiction (fire department). Students are likely basing responses to test questions on the resources within their particular fire department.