

Workforce/Field of Study Report on Assessment for Fall 2024_____

Due to District Discipline Dean by November 15th each year.

Department: _____ **Fire Science** _____

This document serves as an agenda of discussions that should be had by Full-time faculty during the Fall semester of each year as well as a method of documenting what is discussed. Educational programs should have curriculum or assessment committees discuss the indicated sections and should write down answers comprising a departmental response to each of the required questions. Required questions are determined by where your educational program is within the Educational Program Assessment Cycle in the current academic year as shown below:

Position in Continuous Improvement/Program Review Cycle	Required Questions to be Answered
Years 1 and 3	1(a and b), 2a, 3a
Years 2 and 4	1(a and b), 2b, 3b
Year 5	No Report is Due

1) Question #1:

- a.) Briefly Describe where your program is in the Program Review/Continuous Improvement Plan cycle and make sure that all Full-time faculty are aware of where the program is in this cycle for this academic year.

The Fire Science program is currently in Year 4 of the Continuous Improvement Plan cycle. Full-time faculty are included in all departmental meetings.

- b.) Distribute the Current Program Assessment Plan to full-time faculty and discuss the value of the identified learning outcomes, measures, and targets that have been identified by the program to help identify the most challenging concepts/topics/knowledge/skills/abilities for students to learn in the program curriculum.

Assessment Plan for Program Learning Outcomes

Review existing assessment methods and current practices for collecting/gathering student data to identify direct (and possibly indirect methods of assessment). Remember that the data will need to be gathered, analyzed, and used to support the program's continuous improvement processes.

Note: Because courses from other disciplines already have assessment plans in place, they do not have to be included in this assessment plan. Nonetheless, proposers must work collaboratively with these other disciplines to stay current and up-to-date with the assessment plans in these courses.

Program-Level Learning Outcome (e.g. Students will describe the impact of various cultures on American cuisine.)	Assessment Measure(s) and Where Implemented in Curriculum – Description of Instrument(s)/ process(es) used to measure results and indication of where the assessment will be collected in curriculum. (e.g. Essay on Cultural influences on American cuisine in CUIS 1300.)	Targets- Level Expected (e.g. 80% of students score 80% or higher for essay on culture)
PLO-1. Demonstrate proper donning of personal protective equipment (PPE) ensembles including Self-Contained Breathing Apparatus (SCBA).	Skills Check-off in FIRS 1301- Firefighter Certification I. With PPE and SCBA readied, students will demonstrate proficiency in donning and using PPE and SCBA. (NFPA 1001 4.3.1)	70% of the students will a of PASS on their first atten
PLO-2. Students will be able to identify the classification of a variety of fires and select appropriate extinguishing agents and equipment necessary to extinguish any class of fire. Choose attack techniques, forecast fire growth potential, and apply extinguishing agents to various types and sizes of fire.	Skills Check-off in FIRS 1313 – Firefighter Certification III in which students will identify the proper classification of a fire, select the appropriate extinguishing agent, and apply the agent using the equipment and techniques necessary to extinguish the fire.	70% of the students will a of PASS on their first atten
PLO-3. Demonstrate proficiency in skills necessary to ventilate a structure as a member of a team.	Team-based Live Fire Training Exercise in FIRS 1319 – Firefighter Certification IV in which a team of students will be given an assignment, PPE, ventilation tools, equipment, and ladders to perform ventilation on a structure so that the	70% of the students will a of PASS on their first atten

	ventilation openings are free of obstructions, tools are used as designed, ladders are correctly placed, ventilation devices are correctly placed, and the structure is cleared of smoke. (NFPA 1001 4.3.12)	
PLO-4. Search an area, locate and remove victims from a hazardous area, vehicle, or environment, as a member of a team.	Team-based Live Fire Training Exercise in FIRS 1323 – Firefighter Certification V in which teams of students will conduct a search and rescue activity in a structure, given the necessary equipment, so that all areas are searched, victims are removed, and team members' safety is not compromised. (NFPA 1001 4.3.9, 5.4)	70% of the students will a of PASS on their first atten
PLO-5. Identify pump functions and demonstrate the use of a pump to produce a variety of effective fire streams.	Written exam and Lab exercise in FIRS 1329 – Firefighter Certification VI in which students will: a) answer questions correctly identifying pump functions and b) demonstrate the use of pump functions to create various fire streams for extinguishment of fire and protection of unburned areas. (NFPA 1001 4.3.10)	a) 70% of the students w designation of PASS o the written exam. b) 70% of the students w designation of PASS o the lab exercise.

2) Question #2

a. **(Years 1 and 3 of CIP/Program Review Cycle)** Describe the action plan being implemented in the Continuous Improvement Plan for the current academic year.

i. What assessment measure is being implemented to measure the impact of the action plan on student learning and what data is being collected? What is the targeted level of success?

ii. How will the department communicate with adjunct faculty about the action plan to be implemented and the process for collection of data?

iii. What process will the department use to collect data on the *action plan*?

iv. What process will the department use to collect data on the *program assessment plan*?

v. Who will be responsible for collecting and maintaining the data arising from the action plan and the data arising from the program assessment plan? Where will the data be stored? Who will back up this individual so that the department can maintain knowledge of the location of this data?

b. **(Years 2 and 4 of CIP/Program Review Cycle)** Discuss the results from the implementation of the Action Plan in year 1 or 3 and the results of the assessment plan data collected in the same year.

- i. Provide and evaluate the data from implementation of the action plan and provide the data from the program assessment plan. What conclusions can be drawn from each data source?

							Average
5. Identify pump functions and operations necessary to produce effective fire streams (FIRS 1329)	64.1	70.34	61.71	64.23			65.09

Outcome: Identify apparatus pump functions, theory, and principles of operation.

Measure: Course exams

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

Results: Pass rate of 65% (below target)

Findings: Results of this effort showed some improvement, but students still have problems relating the questions to what they see in practice.

- ii. Was the action plan successful? Please explain why or why not?

The use of textbook publisher test banks to increase the number of test questions did not have a positive impact on student performance. 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 older vehicles.

- iii. How will the results of the last action plan be shared with full-time and part-time faculty members teaching in the program?

Results are shared with faculty members during the departmental meetings.

- iv. Upon examining the results of the action plan and examining the data collected under the program assessment plan, what will the next action plan entail.

The next action will entail a continued evaluation of student performance operating both old and new fire engines used in the Fire Science program.

- v. Draft the next action plan, the learning outcome to be acted upon, a measure to determine the positive or negative effects of the action plan, and a desired target of success that will be implemented in the next CIP cycle.

The next action plan will include continued evaluation of student performance operating both old and new engines. Results will be analyzed for common errors to determine if student misunderstanding is unique to one particular task of the pumping process or if the problem is broad in nature.

3) Question #3

- a. **(Years 1 and 3 of CIP Program Review Cycle)** Does the Department need to change the learning outcomes in the assessment plan to better identify the most challenging concepts/topics/knowledge/skills/abilities for students to learn in the program curriculum?

- b. **(Years 2 and 4 of CIP Program Review Cycle)** Describe the impact of the findings/conclusions from the prior action plan and the findings/conclusions from the assessment plan data on program curriculum or teaching pedagogy.

- i. Attach the CIP report for Year 2/4.

- ii. Describe the targeted learning outcome, assessment measure, and targeted level of success that the program intends to implement in the next CIP.

Targeted Learning Outcome: 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.

Assessment Measure: Departmental skill evaluations.

Level of Success: 70% pass rate on the skill.

Submitted by Program Faculty Member:

Pat McAuliff

Signature

December 13, 2024
Date

Reviews by Program Administrators:

District Discipline Dean:

Signature

Date

Campus Provost To Whom the Dist. Disc. Dean Reports:

Signature

Date