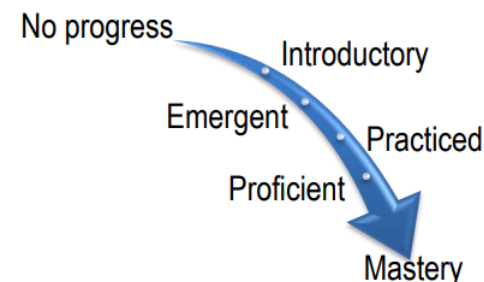


## Associate of Applied Science in Fire Science

At Purdue University Global, we employ a method called **Course-Level Assessment**, or CLA, to determine student mastery of Course Outcomes. Through CLA, we measure how well students gain the skills, knowledge, abilities, and behaviors that employers expect of program graduates. A series of courses prepares students for employment by providing preparation, practice, and opportunities to show mastery of these program outcomes. Each course is developed around a number of learning goals, known as course outcomes, that support a student’s growing mastery of program level outcomes. Faculty members assess each student’s mastery of each course outcome through Course Level Assessments.



### Program Measure for *Standard of Success*:

- 75% or more of students attempting the outcome will perform at the **Emergent** level or greater in **100/200** level courses
- 75% or more of students attempting the outcome will perform at the **Practiced** level or greater in **300/400** level courses

### AASFS 1 – Fire Foundational Fire Fighter Skills Program Outcomes

Discuss the importance of building construction as it relates to firefighter safety, building codes, and fire prevention.

Course #	Measurement	Assessment/ Evaluation Results: % Emergent or greater	Meets Criteria
FS102	Apply the standards of building construction, as well as building and fire codes, to firefighter safety.	FS102-1 = 93.22%	Yes
FS102	Define the basic codes and regulations related to building construction projects.	FS102-4 = 95.0%	Yes
FS102	Examine the various types of construction materials in order to describe the dangers posed to firefighters.	FS102-5 = 92.73%	Yes
FS103	Illustrate common problems firefighters face in relation to hydraulics and water supply.	FS103-1 = 85.19%	Yes
FS103	Describe the principles of various water systems.	FS103-2 = 79.41%	Yes
FS103	Contrast water system adequacy with reliability.	FS103-3 = 85.29%	Yes
FS103	Identify community fire flow demands and water supplies.	FS103-4 = 73.53%	No
FS103	Apply methods of pumping operations given the current incident or situation.	FS103-5 = 70.37%	No
FS103	Discuss fire stream tactics and principles.	FS103-6 = 59.26%	No
FS104	Interpret fire suppression and detection systems as presented in building construction plans.	FS104-1 = 94.87%	Yes
FS105	Describe development of fire safety codes, inspection procedures, and enforcement.	FS105-3 = 97.96%	Yes
FS202	Explain how fire protection services are organized.	FS202-2 = 82.50%	Yes
FS204	Identify the components of response safety plans, pre-incident planning procedures, and training safety policies.	FS204-5 = 97.50%	Yes
FS299	Describe the difference between fire resistance and flame spread, and the testing procedures used to establish ratings for each.	FS299-1 = 95.00%	Yes

### AASFS 2 – Knowledge Base Program Outcomes

Investigate technical, legal, and social aspects of arson.

Course #	Measurement	Assessment/ Evaluation Results: % Emergent or greater	Meets Criteria
FS101	Identify the types of fire spread.	FS101-3 = 94.73%	Yes
FS101	Interpret and explain the factors that have an effect on the energy release rate.	FS101-4 = 94.87%	Yes
FS101	Describe the role fire gases play in the development and spread of fire.	FS101-5 = 91.43%	Yes
FS104	Interpret fire suppression and detection systems as presented in building construction plans.	FS104-1 = 94.87%	Yes
FS104	Illustrate various types of fire protection systems.	FS104-2 = 100%	Yes
FS104	Discuss extinguishment methods and effective use of clean agent systems.	FS104-3 = 93.62%	Yes
FS104	Define the functions of a fire alarm system and proper inspection, testing and maintenance requirements.	FS104-4 = 83.33%	Yes
FS105	Describe how the role of the fire service administration, with regards to fire prevention, works in municipal government.	FS105-4 = 93.62%	Yes
FS299	Describe the difference between fire resistance and flame spread, and the testing procedures used to establish ratings for each.	FS299-2 = 76.74%	Yes

### BSFS 3 – Psychology Outcomes

Analyze the issues that deal with the psychological effects of fire dynamics.

Course #	Measurement	Assessment/ Evaluation Results: % Emergent or greater	Meets Criteria
FS101	Explain heat flux as well as its implications in the danger of fire heat transfer.	FS101-2 = 88.89%	Yes
FS204	Explain the history of health and safety programs for emergency service agencies.	FS204-1 = 100%	Yes
FS204	Describe occupational health and safety programs utilized in emergency services.	FS204-2 = 100%	Yes
FS299	Describe occupational health and safety programs utilized in emergency services.	FS299-3 = 87.81%	Yes