CTE Approval Self-Study Report

Fire Rescue

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Self-study

> *Self-study is the first step in the career and technical education approval process. The self-study review is required for all existing programs and new programs seeking approval. Its purpose is to bring together partners to review the CTE program, propose relevant modifications, and evaluate the degree to which the program meets the policy requirements approved by the Board of Regents on February 6, 2001.*

Self-study review will include:

Curriculum review

Benchmarks for student performance and student assessment

Teacher certification and highly-qualified status of instructional staff

Work-based learning opportunities

Teacher and student schedules

Resources, including staff, facilities, and equipment

Accessibility for all students

Work skills employability profile

Professional development plans

Projected number of students to be served

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

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Fire/Rescue

Quick Facts: Firefighters	
2020 Median Pay	$52,500 per year $25.24 per hour
Typical Entry-Level Education	Postsecondary nondegree award
Work Experience in a Related Occupation	None
On-the-job Training	Long-term on-the-job training
Number of Jobs, 2020	317,200
Job Outlook, 2020-30	8% (As fast as average)
Employment Change, 2020-30	26,900

What Firefighters Do

Firefighters control and put out fires, and respond to emergency situations where life, property, or the environment is at risk.

Work Environment

When on the scenes of fires and other emergencies, the work can be very dangerous. When not on the scene of an emergency, firefighters spend their time at fire stations, where they sleep, eat, and remain on call during shifts that often last 24 hours. Many work more than 40 hours per week.

How to Become a Firefighter

Firefighters typically need a high school diploma and training in emergency medical services. Most firefighters receive training at a fire academy, must pass written and physical tests, complete a series of interviews, and hold an emergency medical technician (EMT) certification.

Pay

The median annual wage for firefighters was $52,500 in May 2020.

Job Outlook

Employment of firefighters is projected to grow 8 percent from 2020 to 2030, about as fast as the average for all occupations. Competition for jobs will likely be strong. Physically fit applicants with high test scores and paramedic training will have the best job prospects.

Related Occupations

Occupational Title	SOC Code	Employment, 2020	Projected Employment, 2030	Change, 2020-30	
				Percent	Numeric
Fire inspectors	33-2020	17,700	19,700	11	2000
Fire inspectors and investigators	33-2021	14,700	16,000	9	1,300
Forest fire inspectors and prevention specialists	33-2022	3,000	3,700	24	700

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Firefighters, at https://www.bls.gov/ooh/protective-service/firefighters.htm (visited March 24, 2022).

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A. Curriculum Review

> *The curriculum review is a step in the self-study process. It is an opportunity for members of the self-study team to evaluate the proposed curriculum for completeness in terms of the knowledge, skills, and competencies required in the program field. The team reviews the curriculum to ensure that course content in the career and technical education program meets State Education Department regulations, contributes to achievement of state and industry standards, and prepares students for successful completion of a technical assessment. Approved curriculum content is nonduplicative, challenging, organized along a continuum of difficulty, and free of bias.*
>
> *CTE program approval does not constitute Department approval or endorsement of proprietary curriculum or related curriculum products. Program approval indicates only that a school district or BOCES has provided the Department with assurances that the curriculum review has been completed.*

Process

- The school district or BOCES identifies the faculty members and other individuals who will be involved in conducting the curriculum review
- The school district or BOCES determines the procedures used in completing the curriculum review
- Reviewers confirm that CTE program content aligns with state CDOS standards, relevant state academic standards, and related business and industry standards
- Reviewers confirm that CTE program content includes integrated or specialized units of credit
- Reviewers confirm that the CTE program meets unit of credit and other distributive requirements
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Documentation

Documentation of the curriculum review is maintained by the school district or BOCES and is updated whenever modifications are made to the approved CTE program. Recommendations from curricular review should be included in the self-study report and reviewed by the external committee.

Resources

New York State graduation requirements

http://www.emsc.nysed.gov/part100/pages/1005.html

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

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Syracuse City School District
Career and Technical Education Program
Course Syllabus
FRP100: Fire Rescue 100

Program Overview

The Fire Rescue program at PSLA is designed to provide students with experience in the field of firefighting and to prepare them for the fire academy. Throughout the program, a wide range of topics will be covered including fire safety and awareness, fire suppression, firefighter survival skills, and planning for a city-wide disaster. Students will become certified in CPR and First Aid, receive Certified First Responder (CFR)/Emergency Medical Responder (EMR) certification, and Emergency Medical Technician-Basic (EMT-Basic) certification. The program offers job shadowing and internship experiences, the opportunity to earn college credits from OCC and credit for the completion of New York State Firefighter courses. Those successfully completing the program will earn a Regents diploma and pass an industry-based assessment to receive a technical endorsement on their diploma. Career opportunities for graduates from the program include firefighter, fire protection professional, industrial fire safety professional and fire investigator.

Course Description

In this introductory course, students will become aware of the broad field of fire suppression. Students begin to develop the fire skills necessary for handling the challenges and demands of fire protection. Topics covered will include the science of fire, fire protection and prevention, fire safety, the basic organization and functions of a fire department and other agencies involved in fire protection. Other topics covered are statistics of fire loss and a review of current and future fire protection problems. Throughout the program, students will participate as a team member in weekly physical training (PT) drills to improve their physical and mental health.

Work-Based Learning

Students will be connected with working fire rescue professionals in the community through guest speakers, Career Coaching, field trips, and job shadowing leading to further opportunities for direct job training and real-world experience. Students will create and maintain a portfolio of their work-based learning experiences throughout the program to document the development of their skills.

Pre-Requisites

N/A

Course Objectives

Students will:

1. Practice the personal and physical attributes of successful firefighters.
2. Demonstrate basic firefighting tactics and procedures.
3. Demonstrate proper use of personal protective equipment (PPE).
4. Explain various types of fire apparatus and common equipment carried by Fire Rescue workers and demonstrate their functions.
5. Apply the technical terminology of fire service.
6. Describe how various emergency providers interact with each other.

Integrated Academics

N/A

Equipment and Supplies

- **School will provide:** Textbooks and all other print material; PT Gear (2 PT T-shirts, 1 sweat suit); Class uniform (1 uniform pant, 1 uniform shirt, 1 pair shoes, 1 belt)
- **Student will provide:** N/A

Textbook

International Fire Service Training Association (IFSTA). (2013). *Essentials of Firefighting and Fire Department Operations. 6th Edition.* Stillwater, OK: Fire Protection Publications.

Grading

20% Tests
15% Quizzes
15% Classwork
10% Homework
20% Participation
20% PT Grade

Additional Course Policies

Students must receive a standard sports physical for entry into this course. Students are required to follow all classroom and training safety rules. Students must participate in weekly Physical Training Drills.

Course Calendar

Quarter	Units of Study
1	• Personal Qualities and Attributes of Fire Rescue Workers • Communication Skills Among the Fire Rescue Team and with Victims • Personal Health and Fitness Requirements for Fire Rescue Personnel • Introduction to Fire Rescue Careers • Companies and Battalions • Legal and Ethical Issues
2	• The Science of Fire • Building Construction and Fire • Fire Extinguishers • Fire Safety and Personal Protective Equipment (PPE) • Self-Contained Breathing Apparatus
3	• Fire Detection Systems and Sprinkler Systems • Water Supplies and Fire Hydrants • Fire Hoses and Hydrants • Advancing Hose Lines • Fire Streams and Foams • CPR Training and First Aid Certification • Survival and Search Skills
4	• Fire Ventilation • Ladders • Ropes and Knots • Forcible Building Entry • Vehicle Fires • Final Exam

Syracuse City School District
Career and Technical Education Program
Scope and Sequence
FRP100: Fire Rescue 100

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Week 1 **Personal Qualities and Attributes of Fire Rescue Workers**	• What personal qualities should fire rescue personnel possess? • What skills do you currently have? • What skills do you need to develop to be successful?	• Identify and describe personal characteristics needed for fire rescue workers. • Identify and create a profile of personal qualities to be developed during the fire rescue program, including: ✓ Integrity: honesty, trustworthiness, reliability and accountability. ✓ Tolerance and respect for diversity. ✓ Flexibility/adapting to change. ✓ Courage. ✓ Confidence and resilience. ✓ Teamwork. ✓ Effective communication and interpersonal skills. ✓ Critical thinking and problem-solving skills. ✓ Situational awareness. ✓ Commitment to excellence. ✓ Awareness of public image.	• Research on personal qualities • Individual assessment of personal attributes • List of personal attributes to be developed during the program • Team developed personal profiles for fire rescue workers • Comparison of individual personal aptitudes/ attributes with those required for fire rescue personnel • Teacher and student developed rubric to evaluate personal qualities during the program	**Career Ready Practices** CRP 1,2,4,7,8 **Cluster Standards** LW 1,6 **Pathway Standards** LW-EFM 1	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science**
Week 2 **Communication Skills Among the Fire Rescue Team and with Victims**	• Why are communication skills critical for fire personnel? • What does it mean to be a people person? • What is nonverbal communication? • What is your communication style? • What are some barriers to effective communication?	• Explain the importance of communication among members of the fire rescue team. • Describe nonverbal communication, including eye contact, facial expressions, personal space and body language. • Describe verbal communication styles and types. • Identify of barriers to effective communication.	• Written summaries of communication types and rationales for adjusting to selected audiences • Team developed verbal and nonverbal communication guidelines • Posters and/or bulletin board displays • Role play of verbal and non-verbal communication scenarios	**Career Ready Practices** CRP 1,2,4,8,9 **Cluster Standards** LW 2 **Pathway Standards** LW-EFM 1,4,9	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	• What does diversity mean? • How do language and culture impact the way fire rescue workers communicate?	• Define diversity and explain how it affects communication in emergency situations.			
Weeks 3-4 **Personal Health and Fitness Requirements for Fire Rescue Personnel** **Physical Training (PT)**	• What fitness and physical characteristics are required of fire rescue personnel? • What does physical fitness mean as it relates to a fire rescue worker's job performance? • Are you ready to pass the fitness test? • What is meant by personal health? • What is a healthy lifestyle and how does it affect fire rescue employees? • What lifestyle choices negatively affect health? • Are you physically and mentally fit?	• Describe the physical demands of fire rescue workers. • Assess personal fitness level and determine readiness for fire rescue work. • Identify individual baseline levels for personal fitness. • Explain the concept of a personal healthy lifestyle. • Describe proper nutrition. • Identify nutrition needs and food sources. • Identify healthy choices and explain how selections impact overall wellness/health. • Describe the process of decision making for developing a safe and healthy lifestyle. • Recognize harmful choices related to nutrition, sleep, drug and alcohol use. • Improve fitness levels and work as a member of a cohesive unit/team.	• Research and written summaries of the physical demands on fire rescue workers • Fitness tests • Baseline fitness data rubric • Two-week journal of food intake and physical activity • Review and analysis of journal information • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,3,4,7,11 **Cluster Standards** LW 1,3 **Pathway Standards** LW-EFM 1,4	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** HS-LS1-2,1-3 LE-S4-K5 S2.K1 S6.K5
Weeks 5-6 **Introduction to Fire Rescue Careers** **Physical Training (PT)**	• What career opportunities are available to fire rescue workers? • What is the role of firefighters?	• Distinguish job titles and explain the corresponding roles, responsibilities, educational requirements and wages. • Describe the function of dispatchers and how they interact with the fire rescue team.	• Electronic research including education, training, certifications and wage information • Group presentations on selected pathways	**Career Ready Practices** CRP 1,2,4,7,11 **Cluster Standards** LW 1,9,10 **Pathway Standards**	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	• What are the training/ education/certifications required? • What are the differences between firefighters and forest fire fighters? • What are emergency dispatchers, and how do they work with fire rescue workers? • What is a fire prevention inspector? • Are you physically and mentally fit?	• Explain the role of fire prevention inspectors and the reasons they are required. • Improve fitness levels and work as a member of a cohesive unit/team.	• Weekly physical fitness training demonstrating increase from baseline achievement	LW-EFM	S2.K1 S6.K5 HS-LS1-3
Week 7 **Companies and Battalions** **Physical Training (PT)**	• What are the different types of companies found in a fire department? • What are their roles and responsibilities? • What is meant by the chain of command and how is it applied in companies and battalions? • Are you physically and mentally fit?	• Examine the way a fire department is divided into the various companies. • Analyze each company's tasks when on an emergency response. • Describe the methods in which companies interact and work independently during a fire rescue event. • Distinguish the reasons for each company to have its specialized tasks. • Explain the meaning of chain of command and the ways it impacts communication in companies and battalions. • Improve fitness levels and work as a member of a cohesive unit/team.	• Written assignment on companies and battalions and the chain of command • Quiz on roles of companies • Vocabulary quiz • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,4,9,12 **Cluster Standards** LW 4 **Pathway Standards** LW-EFM 1,4.6,7	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S2.K1 S6.K5 HS-LS1-3
Weeks 8-9 **Legal and Ethical Issues** **Physical Training (PT)**	• What are the most important personal safety considerations for fire rescue personnel?	• Describe the basics rules of personal and crew safety on the job. • Explain safety and the role of Fire Rescue personnel.	• Team presentation and rubric on Fire Rescue Requirements	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 4	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	• How do legal issues impact fire rescue personnel? • What does data collection and record-keeping look like in fire rescue situations? • What are the protocols required in data collection and recording? • What guidelines should fire rescue personnel follow to protect themselves from legal action? • How do HIPAA, Patients' Rights and ADA impact the fire rescue career field? • What is the impact of the Good Samaritan Act on fire rescue personnel? • What does the term ethics mean? • Why should ethics always be a consideration for fire rescue personnel? • What is an ethical decision? • Are you physically and mentally fit?	• Explain current legal and ethical issues relevant to Fire Rescue personnel. • Explain the responsibilities of record keeping and data collection in Fire Rescue. • Analyze HIPAA regulations, Patients' Rights, and the American with Disabilities Act and their relevance to the Fire Rescue position. • Predict how ethical decisions impact Fire Rescue personnel. • Examine the Good Samaritan Act and how it affects the Fire Rescue personnel in providing medical services. • Improve fitness levels and work as a member of a cohesive unit/team.	• Written assignment on HIPAA Case Violation • Summary of Patients' Right Documents and what they protect • Summary of research on current legal issues in the fire rescue field • Written statement of ethical behavior • Quiz on Good Samaritan Act • Article summary of fire rescue legal issues • Research case where fire rescue personnel have been challenged under the Good Samaritan Act • Ten Week Assessment • Weekly physical fitness training demonstrating increase from baseline achievement		9-10WHST 2,5,6,7 **Pathway Standards** LW-EFM 4	**Science** SI1.K3 S2.K1 S6.K5 HS-LS1-3
Weeks 10-13 **The Science of Fire** **Physical Training (PT)**	• What environmental changes impact the behavior of a fire? • What are the different types of fires? • Why is it important for firefighters to know and	• Identify the basic components needed for fire. • Examine the various types of fires and how each reacts to a given environment.	• Written summary on managing different types of fire and control techniques • Guest Speaker: Questions and written reaction papers	**Career Ready Practices** CRP 1,2,5,6,12 **Cluster Standards** LW 1 **Pathway Standards** LW-EFM 5	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S6.K2

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	understand the characteristics of fire types? • What is important to know about how a fire progresses and is controlled? • What do firefighters need to do to stay safe during different types of fire? • Are you physically and mentally fit?	• Analyze the different methods of controlling a fire. • Describe the conditions and external variables that affect a fire's development and control. • Identify safety precautions necessary in each type of fire. • Improve fitness levels and work as a member of a cohesive unit/team.	• Quiz on characteristics of fires and ways to predict their reactions • Weekly physical fitness training demonstrating increase from baseline achievement		HS-PS3.1 S2.K1 S6.K5 HS-LS1-3.
Week 14 **Building Construction and Fire** **Physical Training (PT)**	• How do different construction types affect fire growth? • What do fire rescue personnel need to consider to work safely and effectively in specific structures? • Are you physically and mentally fit?	• Identify the different types of building construction. • Examine the impact of construction on fire growth. • Describe the ways building construction changes how firefighters attack a fire. • Improve fitness levels and work as a member of a cohesive unit/team.	• Pictures and descriptions of building types around Syracuse • Written analyses on building construction, firefighter awareness and correct approaches to selected construction types • Application of regulations and protocols for personal and team safety • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,3,4,5,9,12 **Cluster Standards** LW 1 **Pathway Standards** LW-EFM 5,10,15	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S6.K2 SI1.K2 S2.K1 S6.K5 HS-LS1-3.
Week 15 **Fire Extinguishers** **Physical Training (PT)**	• What are the various types of portable fire extinguishers? • Why does each one have a different use? • What is the life of a fire extinguisher and how is it determined?	• Identify different types of fire extinguisher and explain where each would be used. • Demonstrate the proper care and operation of fire extinguishers. • Improve fitness levels and work as a member of a cohesive unit/team.	• Practical exam on identifying the various types of extinguishers • Group developed tri-folds on types and proper use of fire extinguishers • Design a fire extinguisher inspection program	**Career Ready Practices** CRP 1,2,4,8,11 **Cluster Standards** LW 1 **Pathway Standards** LW-EFM 5,9,10	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** PSS4.K3 S2.K1 S6.K5 HS-LS1-3.

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	• What happens to a fire extinguisher after being used on a fire? • What are the rules for fire extinguisher safety? • Are you physically and mentally fit?		• Critical thinking and decision-making rubric • Quiz on types, care and use of fire extinguishers • Weekly physical fitness training demonstrating increase from baseline achievement		
Weeks 16-18 **Fire Safety and Personal Protective Equipment (PPE)** **Physical Training (PT)**	• What are the safety issues that Fire Rescue personnel face while on the job? • What are the roles of the department, the team, and the individual in firefighter safety? • What types of personal protective equipment (PPE) are necessary? • What equipment is used by fire rescue workers for personal and team safety? • What skills are necessary to correctly operate the equipment? • What vocabulary does a fire rescue worker need to use in fire safety and PPE? • Are you physically and mentally fit?	• Describe the safety issues affecting firefighters. • Explain the different responsibilities for safety of the department, the team, and the individual. • Explain the importance of personal and team decision making related to safety in the work environment. • Identify the components of Personal Protective Equipment for fire rescue and demonstrate how each one protects the fire rescue worker. • Improve fitness levels and work as a member of a cohesive unit/team.	• Written assignment on current safety issues for firefighters • Group presentations on Personnel Protective Equipment • Flow chart of skills a fire rescue person must have in using PPE • Correct donning and removal of PPE in specified situations • Rank order of the most to the least used PPE • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,3,5,7,12 **Cluster Standards** LW 1 **Pathway Standards** LW-EFM 5,10,13	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** SIS1.K3 S6.K2 S2.K1 S6.K5 HS-LS1-3.
Week 19 **Self-Contained Breathing Apparatus** **Physical Training (PT)**	• How does the self-contained breathing apparatus function and when is it used? • What training and skills are needed for correct operation of	• Explain how self-contained breathing apparatus technology has developed and changed over time. • Analyze a fire rescue event to determine whether a self-contained breathing apparatus should be used.	• Group presentation on self-contained breathing apparatus • Quiz on the care and use of the breathing apparatus	**Career Ready Practices** CRP 1,2,3,7,11,12 **Cluster Standards** LW 1 **Pathway Standards**	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	self- contained breathing apparatus? • How will you determine when a self-contained breathing apparatus is indicated? • Are you physically and mentally fit?	• Demonstrate the operation and maintenance of a self-contained breathing apparatus. • Improve fitness levels and work as a member of a cohesive unit/team.	• Weekly physical fitness training demonstrating increase from baseline achievement	LW-EFM 1,5,10	SI1.K2 S2.K1 S6.K5 HS-LS1-3.
Week 20 **Fire Detection Systems and Sprinkler Systems** **Physical Training (PT)**	• What are the various types of fire detection systems? • What are the various types of sprinkler systems? • Are you physically and mentally fit?	• Explain the difference between smoke, CO, heat, gas, and flame detectors. • Explain the difference between wet, dry, deluge, pre-action, and residential sprinkler systems. • Improve fitness levels and work as a member of a cohesive unit/team.	• Graded homework assignment on use and placement of smoke detectors • Quiz on fire detections and sprinkler systems • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,9,12 **Cluster Standards** LW 1,6 **Pathway Standards** LW-EFM 5,10,13	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** EDS1.K1 S2.K1 S6.K5 HS-LS1-3.
Week 21 **Water Supplies and Fire Hydrants** **Physical Training (PT)**	• What are the various sources of water supply used by a fire rescue team? • What are the different types of fire hydrants used in our city and county? • What are the safety concerns when accessing a fire hydrant? • Are you physically and mentally fit?	• Explain the types of water supplies used to fight fires. • Define how water supplies are accessed by the fire rescue personnel. • Describe the various types of hydrants used by our city and county and their locations and placement. • Demonstrate how to safely access water from a hydrant. • Improve fitness levels and work as a member of a cohesive unit/team.	• Written assignment describing various water supplies • Identification of the various types of hydrants and the tools needed to access water from a hydrant • Practical assessment of accessing water from fire hydrants • Community service exercise of shoveling out fire hydrants • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,9,12 **Cluster Standards** LW 1 **Pathway Standards** LW-EFM 5,10	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** EDS1.K1 S2.K1 S6.K5 HS-LS1-3.

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Week 22 **Fire Hoses and Hydrants** **Physical Training (PT)**	• What types of fire hose are used by the City and County Fire Departments? • How do firefighters determine what type of fire hose should be used? • What does hose load mean? • What are the various hose loads and hose rolls? • Are you physically and mentally fit?	• Explain why each type of hose has its own specific use when fighting a fire. • Calculate the hose loads capable at standard water pressure for various hoses. • Explain why different hose loads are used for different operations. • Improve fitness levels and work as a member of a cohesive unit/team.	• Quiz on visual recognition of types of fire hose • Written assessment on how to identify the various types of hose loads and their advantages and disadvantages • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,7,8,11 **Cluster Standards** LW 1 **Pathway Standards** LW-EFM 5,10	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** MA.S1.K1 S2.K1 S6.K5 HS-LS1-3.
Weeks 23-24 **Advancing Hose Lines** **Physical Training (PT)**	• How are hose lines advanced in a structure? • What are the skills and physical requirements needed to go up and down stairs, using a standpipe, and working from a ladder? • Are you physically and mentally fit?	• Explain how to advance a fire hose in multiple operations. • Demonstrate the procedure for advancing a fire hose up and down stairs. • Explain the use of a stand pipe and how safely to work from a ladder with a fire hose. • Improve fitness levels and work as a member of a cohesive unit/team.	• Hands-on practical team exercise advancing hoses up and down stairs with full equipment • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,8,12 **Cluster Standards** LW 1 **Pathway Standards** LW-EFM 2,5,6,9,10	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** PS.S2.K1 PS.S6.K5 HS-LS1-3.
Week 25 **Fire Streams and Foams** **Physical Training (PT)**	• What is a fire stream? • What is the difference between small, medium and master stream devices? • How does a firefighter determine what master stream should be used when fighting a fire? • What types of fires require the use of foam rather than water?	• Describe the various types of fire streams and their effectiveness. • Demonstrate the various types of fire streams. • Explain when and how to choose which hose stream. • Explain the reason why foam is used in fire service. • Explain where each type of foam is used and why.	• Written summary on various types of hose streams • Responses to scenarios on selecting the appropriate fire stream and the rationale its use • Hands-on exercise using various types of hose streams • Weekly physical fitness training demonstrating	**Career Ready Practices** CRP 1,2,4,6,9,12 **Cluster Standards** LW 2 **Pathway Standards** LW-EFM 1,9,10	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** SI1.K2 SI1.K3 PS.S2.K1 PS.S6.K5 HS-LS1-3.

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	• What are the different types of foam? • What are the factors in selecting the right foam? • Are you physically and mentally fit?	• Explain the chemical makeup of the foams and how they extinguish a fire. • Improve fitness levels and work as a member of a cohesive unit/team.	increase from baseline achievement		
Weeks 26-27 **CPR Training and First Aid Certification** **Physical Training (PT)**	• Why is it important for fire rescue personnel to train in cardiopulmonary resuscitation (CPR)**?** • What key vocabulary applies to CPR performance? • What anatomy and physiology structures are involved in the performance of CPR? • What technical terms are used in CPR? • Are you physically and mentally fit?	• Describe the anatomy and physiology involved in CPR. • Apply technical terms in CPR training. • Correctly perform CPR. • Correctly perform First Aid. • Improve fitness levels and work as a member of a cohesive unit/team.	• Completion of practical and written exams for CPR/ First Aid certification • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,9,10 **Cluster Standards** LW 1,6 **Pathway Standards** LW-EFM 1,2,4,5,9,10	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** LE.S4.K5 PS.S2.K1 PS.S6.K5 HS-LS1-3.
Weeks 28-29 **Survival and Search Skills** **Physical Training (PT)**	• How does a firefighter search a zero/limited visibility environment? • How can a firefighter remove himself/herself from a dangerous situation? • How are search and survivals documented? • Are you physically and mentally fit?	• Describe search techniques for victims and how they differ from a Rapid Intervention Team (RIT) search. • Demonstrate survival skills and rapid egress skills. • Explain the purpose of incident reports and how to complete them. • Improve fitness levels and work as a member of a cohesive unit/team.	• Skills-based practice in limited visibility situations and demonstrating rapid egress • Accurately complete incident reports • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,6,7,8,12 **Cluster Standards** LW 1 **Pathway Standards** LW-EFM 1,2,5,9,10	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S2.K1 S6.K5 HS-LS1-3.
Weeks 30-31 **Fire Ventilation** **Physical Training (PT)**	• What methods and types of ventilation are used when fighting a fire?	• Explain why ventilation helps in fire suppression. • Describe the correct method of ventilation.	• Team problem-solving proper procedures for proper ventilation and fire suppression	**Career Ready Practices** CRP 1,4,5,8 **Cluster Standards** LW 1	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	• What types of fire suppression are used in controlling a fire? • Are you physically and mentally fit?	• Define the difference of between natural and mechanical ventilation. • Explain the differences in extinguishing each type of fire. • Improve fitness levels and work as a member of a cohesive unit/team.	• Skills practical on roof prop • Weekly physical fitness training demonstrating increase from baseline achievement		9-10WHST 2,5,6,7
				Pathway Standards LW-EFM 2,5,10	**Science** SI1.K3 S6.K2 S2.K1 S6.K5 HS-LS1-3.
Weeks 32-33 **Ladders** **Physical Training (PT)**	• How do Fire Rescue personnel decide which ladders to use? • What safety practices are used when working with a ladder? • Are you physically and mentally fit?	• Identify the parts of ladders and explain their construction. • Demonstrate the selection and proper use of ladders in a rescue. • Improve fitness levels and work as a member of a cohesive unit/team.	• Safe ladder practice rubric • Identification of types of ladders • Labeled diagrams of ladder components on multiple types of ladders • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,4,8	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6
				Cluster Standards LW 1	**Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7
				Pathway Standards LW-EFM 2,5,10	**Science** S2.K1 S6.K5 HS-LS1-3.
Week 34 **Ropes and Knots** **Physical Training (PT)**	• What types of ropes and knots are used in the fire service? • How are ropes and knots used in fire rescue situations? • Are you physically and mentally fit?	• Explain the various rope construction methods and their characteristics. • Identify the types of knots used in specific and the reason they were used. • Define the impact of rope and knot safety on firefighting. • Improve fitness levels and work as a member of a cohesive unit/team.	• Demonstration of tying specific knots required of the profession • Quiz on rope and knot identification • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,8,11	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6
				Cluster Standards LW 1	**Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7
				Pathway Standards LW-EFM 5,10	**Science** S2.K1 S6.K5 HS-LS1-3.
Weeks 35-36 **Forcible Building Entry** **Physical Training (PT)**	• What is forcible entry? • How do fire rescue workers correctly perform a forced entry? • How do you determine when a forced entry is necessary? • What tools and equipment are needed in forced entries?	• Explain situations where forcible building entry is used and the tools used to perform a forcible entry. • Define primary and secondary rescue search. • Explain how to determine the need for forced entry.	• Identification of tools and equipment in forced entry • Skills based practice rubric • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,4,6,8,9,12	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6
				Cluster Standards LW 1	**Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7
				Pathway Standards LW-EFM 2,5,10	**Science** ED.S1.K1 S2.K1 S6.K5 HS-LS1-3.

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	• What is a primary and secondary rescue search? • Are you physically and mentally fit?	• Explain the concept of try it before you pry it. • Demonstrate through the lock methods. • Demonstrate a forced entry in a simulation. • Improve fitness levels and work as a member of a cohesive unit/team.			
Weeks 37-38 **Vehicle Fires** **Physical Training (PT)**	• How do vehicle fires start? • How are vehicle fires extinguished? • What safety considerations are needed for fire rescue workers with vehicle fires? • What are the rescue procedures for extricating victims from a burning vehicle? • Are you physically and mentally fit?	• Describe the protocols for examining the scene for safety at the vehicle fire. • Apply the concepts of fire science to vehicle fire scenarios. • Determine the appropriate method to safely extinguish a vehicle fire. • Explain extrication procedures for vehicle fires. • Improve fitness levels and work as a member of a cohesive unit/team.	• Case study reviews and corresponding written reports • Skills testing • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,7 **Cluster Standards** LW 1 **Pathway Standards** LW-EFM 2,5,910	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science**
Weeks 39-40 **Final Exam** **Physical Training (PT)**	• Are you prepared for the final assessments? • Are you physically and mentally fit?	• Prepare for Final Exams. • Improve fitness levels and work as a member of a cohesive unit/team.	• Written Final Exam • Skill Based Final Exam teamed with EMT and Law Enforcement-scenario based • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,6,7,8,9,11,12 **Cluster Standards** LW 1,2,3,4,6 **Pathway Standards** LW-EFM 1,2,5,6,9,10, 11,14	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S2.K1 S6.K5 HS-LS1-3.

Syracuse City School District
Career and Technical Education Program
Course Syllabus
FRP200: Fire Rescue 200

Program Overview

The Fire Rescue program at PSLA is designed to provide students with experience in the field of firefighting and to prepare them for the fire academy. Throughout the program, a wide range of topics will be covered including fire safety and awareness, fire suppression, firefighter survival skills, and planning for a city-wide disaster. Students will become certified in CPR and First Aid, receive Certified First Responder (CFR)/Emergency Medical Responder (EMR) certification, and Emergency Medical Technician-Basic (EMT-Basic) certification. The program offers job shadowing and internship experiences, the opportunity to earn college credits from OCC and credit for the completion of New York State Firefighter courses. Those successfully completing the program will earn a Regents diploma and pass an industry-based assessment to receive a technical endorsement on their diploma. Career opportunities for graduates from the program include firefighter, fire protection professional, industrial fire safety professional and fire investigator.

Course Description

During this course, students will learn some of the science foundations of the fire-rescue field. Students continue to develop critical skills in fire protection and learn about the chemistry of fire, fire suppression agents, chemical properties that create HazMat situations, and indicators of chemical warfare agents. Students will learn about the processes and procedures of fire investigation from evidence collection and preserving the scene through courtroom testimony. The course combines classroom and hands-on application of firefighter skills. Throughout the program, students will participate as a team member in weekly physical training (PT) drills to improve their physical and mental health.

Work-Based Learning

Students will be connected with working fire rescue professionals in the community through guest speakers, Career Coaching, field trips, and job shadowing leading to further opportunities for direct job training and real-world experience. Students will create and maintain a portfolio of their work-based learning experiences throughout the program to document the development of their skills.

Pre-Requisites

FRP100: Fire Rescue 100

Course Objectives

Students will:

1. Gain knowledge in basic firefighting tactics and procedures.
2. Follow fire safety rules and procedures and demonstrate effective use of personal protective equipment (PPE).
3. Demonstrate safe and effective victim removal and transport.
4. Describe Incident Command System (ICS) and its function.
5. Develop skills in emergency radio communications.
6. Explain the chemistry of hazardous materials.
7. Explain the fundamentals of fire chemistry, pyrolysis, and chemical warfare.
8. Explain the procedures of fire investigations.

Integrated Academics

N/A

Equipment and Supplies

- **School will provide:** Textbooks and all other print material; PT Gear (2 PT T-shirts, 1 sweat suit); Class uniform (1 uniform pant, 1 uniform shirt, 1 pair shoes, 1 belt)

- **Student will provide:** N/A

Textbook

Fire, F. L. (1996). *The Common Sense Approach to Hazardous Materials, 2nd edition.* Tulsa, OK: Fire Engineering Books & Videos.

Grading

20% Tests
15% Quizzes
15% Classwork
10% Homework
20% Participation
20% PT Grade

Additional Course Policies

Students must receive a standard sports physical for entry into this course. Students are required to follow all classroom and training safety rules. Students must participate in weekly Physical Training Drills.

Course Calendar

Quarter	Units of Study
1	• Review of Class Expectations • Vocabulary Review • Classroom Equipment Overview • Team Building Activities • Review of Firefighter Survival Skills • Personal Protective Equipment (PPE) • Victim Transport and Removal • Building Construction and Effects of Fire • Radio Communications/Primary Size-Up
2	• Incident Command System (ICS) 100 and 700 • Chemistry of Hazardous Materials • Fire Dynamics and Pyrolysis • Heat Transfer

3	• Fire Investigation
	  ○ Evidence Collection and Documentation
	  ○ Scene Preservation
	  ○ Cause Determination
	  ○ Methods of Preserving a Fire Scene

	○ Psychology of an Arsonist
4	• Fire Investigation: ○ Incendiary Devices throughout History ○ Laws, Sentencing and Expert Testimony • Chemical Warfare Agents and IEDs • Review and Final Exam

Syracuse City School District
Career and Technical Education Program
Scope and Sequence
FRP 200: Fire Rescue 200

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Week 1 **Review of Class Expectations** **Vocabulary Review** **Classroom Equipment Overview**	• What are the classroom expectations, and how can you be a leader in the class? • What key vocabulary do you need to communicate and perform in the class? • What are the names and uses of classroom and training equipment?	• Describe classroom expectations. • Identify and describe the uses of classroom equipment. • Demonstrate the safe and proper use and handling of equipment in the fire rescue classroom.	• Signed expectations contracts • Demonstration of appropriate attitudes and interactions • Skills based test on equipment use and handling	**Career Ready Practice** CRP 1,4,9 **Cluster Standards** LW 2 **Pathway Standards** LW-EFM 4,5,6,10	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S1.K3
Week 2 **Team Building Activities**	• What is the purpose of working together as a team? • Why do firefighters never work alone?	• Define FAST (Firefighter Assist and Search Team). • Explain the 2 in-2 out rule and its application. • Determine how various Line of Duty Deaths (LODD) and injuries might have been prevented with better teamwork.	• Case studies on freelancing incidents and LODD • Written report on the importance of firefighter teamwork	**Career Ready Practice** CRP 1,4,6,9 **Cluster Standards** LW 4 **Pathway Standards** LW-EFM 1,4,5,6,10	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science**
Weeks 3-4 **Review of Firefighter Survival Skills**	• How do fire rescue workers recognize a hazardous situation and how can they remove themselves from the dangerous situation? • What do fire rescue workers need to consider when entering a dangerous situation? • What questions should the fire rescue team be asking prior to entering a dangerous situation? • How do fire rescue workers document events?	• Explain search techniques for victims and how they differ from a Rapid Intervention Team (RIT) search. • Demonstrate rapid egress and survival skills. • Compare and contrast risk vs. benefit in fire rescue. • Accurately document fire rescue events.	• Skills based practice and assessment • Written summary of risk vs. benefits at an emergency event • Proper completion of incident reports	**Career Ready Practice** CRP 4,6 **Cluster Standards** LW 1 **Pathway Standards** LW-EFM 2,3,5,6,10	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S1.K2 S6.K2 S7.K1

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Week 5 **Personal Protective Equipment (PPE)**	• What types of personal protective equipment (PPE) are necessary for fire rescue workers? • How is PPE constructed and tested? • How do you determine the appropriate PPE for different circumstances?	• Identify the components of Personal Protective Equipment for fire rescue. • Demonstrate how each PPE type protects the fire fighter. • Examine emergency situations and identify potential risks of using incorrect PPE.	• Group flow charts of the skills a fire rescue person must have in using PPE • Ranking of the most to least used PPE in fire rescue • PPE practical assessment	**Career Ready Practice** CRP 1,2,4,9,11,12 **Cluster Standards** LW 2 **Pathway Standards** LW-EFM 3,4,5,10	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S1.K3 S2.K1 S6.K2
Week 6 **Victim Transport and Removal** **Physical Training (PT)**	• What methods of victim removal are used in an emergency situation, and how do fire rescue workers determine the correct method? • Are you physically and mentally fit to become a fire rescue worker? • Why are these qualities important? • What does it mean to be mentally fit as a fire rescue worker?	• Explain and apply the concepts of victim removal to determine the correct method of moving/removing patients from unsafe situations. • Explain the importance of physical and mental fitness in fire rescue. • Determine baseline fitness levels and set improvement goals.	• Practical assessment on victim movement, removal and transport • Research on physical and mental requirements for fire rescue workers • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practice** CRP 1,3,4,6,8,9,12 **Cluster Standards** LW 1,2,3,6 **Pathway Standards** LW-EFM 1,2,3,5,9,10	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S2.K1 S6.K5 HS-LS1-3.
Week 7 **Building Construction and Effects of Fire** **Physical Training (PT)**	• How do different construction types effect fire growth? • Why are certain construction types more dangerous than others for firefighters? • How does building construction change the way an attack may be made on a fire? • Are you physically and mentally fit?	• Identify the different types of building construction. • Examine the impact of construction on fire growth. • Summarize current research on physical and mental fitness. • Improve fitness levels and work as a member of a cohesive unit/team.	• Pictures and descriptions of building types around Syracuse • Written analyses on building construction and firefighter awareness • Role plays of scenarios applying the elements of mental fitness • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practice** CRP 3,4,6,8,12 **Cluster Standards** LW 1,2,3,6,12 **Pathway Standards** LW-EFM 3,5,10,15	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S1.K2 S2.K1 S6.K2 HS-LS1-3.

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Week 8 **Radio Communications/ Primary Size-Up** **Physical Training (PT)**	• What is the proper method for radio communication and when should radios be used? • What information is important to convey to incoming fire companies? • Are you physically and mentally fit?	• Define key terms and acronyms used in radio communication. • Determine when radios should be used and when they should not be used. • Relay information on the fire scene over the radio. • Apply basic communication skills demonstrating the concepts of mental fitness for fire rescue workers. • Improve fitness levels and work as a member of a cohesive unit/team.	• Quiz on radio use and protocols • Practical assessment on calling a mayday and giving a size-up • Effective communication and modeling mental health, judgment and decision making for fire rescue • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practice** CRP 3,4,6,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,5,9,10,11	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S2.K1 S6.K5 HS-LS1-3.
Weeks 9-13 **Incident Command System (ICS) 100 and 700** **Physical Training (PT)**	• What are NIMS and FEMA? • How does ICS affect the duties of an EMT and who is required to have ICS Certification? • How is an emergency incident properly run? • What is the command structure for an emergency incident? • Are you physically and mentally fit?	• Examine the purpose of ICS and its basic features. • Discuss the National Incident Management System (NIMS) and the purpose of the Federal Emergency Management Agency (FEMA). • Analyze the role and functions of the Incident Commander, command staff, general staff, operations, planning, logistics and finance/administration sections. • Describe the six basic ICS facilities. • Identify facility map symbols. • Describe emergency incident protocols and emergency incident command structure. • Improve fitness levels and work as a member of a cohesive unit/team.	• Written summaries of emergency incident protocols • Completion of FEMA's ICS 100 and ICS 700 courses • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practice** CRP 1,3,4,9,12 **Cluster Standards** LW 2,3,4 **Pathway Standards** LW-EFM 2,4,6,9,11,14	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** MAS1.K1 S2.K1 S6.K5 HS-LS1-3.
Weeks 14-15 **Chemistry of**	• What is HazMat?			**Career Ready Practice** CRP 2,3,5,7,9,12	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Hazardous Materials **Physical Training (PT)**	• What are hazardous materials? • Which agencies regulate the use and handling of hazardous materials? • What do fire rescue workers need to know to work safely with hazardous materials? • Are you physically and mentally fit?	• Describe materials classified as hazardous material. • Define HazMat and identify the associated regulatory agencies. • Identify the chemistry of hazardous materials. • Explain how to contain HazMat situations. • Improve fitness levels and work as a member of a cohesive unit/team.	• Research and written reports on HazMat and regulatory agencies • HazMat Response certification through Saferesponse.com • Weekly physical fitness training demonstrating increase from baseline achievement		9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6
				Cluster Standards LW 2,3	**Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7
				Pathway Standards LW-EFM 3,5,12	**Science** ED.S1.K1 S1.K2 S2.K1 S4.K3, K4 S6.K5 HS-PS1-2.3.9.
Weeks 16-17 **Fire Dynamics and Pyrolysis** **Physical Training (PT)**	• What are the four types of fire? • How does fire grow and develop? • How can this process be stopped or contained? • Are you physically and mentally fit?	• Discuss the four types of fires. • Describe the chemical components of fire. • Explain the fire tetrahedron and the effects of changing a component in the fire tetrahedron. • Improve fitness levels and work as a member of a cohesive unit/team.	• Questions for guest speaker on fire dynamics • Written summaries on fire presentation • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practice** CRP 1,2,3,5,7,12	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6
				Cluster Standards LW 1,2,3	**Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7
				Pathway Standards LW-EFM 3,4,5,12	**Science** S2.K1 S6.K2,5 HS-LS1-3 HS-PS3-1
Week 18 **Heat Transfer** **Physical Training (PT)**	• What is meant by the term heat transfer? • What are the different methods of heat transfer and how these change fire patterns and growth? • Are you physically and mentally fit?	• Define heat transfer. • Describe the three methods of heat transfer and explain how they change fire patterns and growth. • Improve fitness levels and work as a member of a cohesive unit/team.	• Summary of field visit to arson training center • Questions for guest speaker • Reaction papers on guest speaker information • Practical assessment in identifying and working with different methods of heat transfer • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practice** CRP 2,3,5,7,9,12	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6
				Cluster Standards LW 2,3	**Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7
				Pathway Standards LW-EFM 5,12	**Science** S2.K1 S4.K4 S6.K5 HS-LS1-3 HS-PS3-2

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Weeks 19-21 **Fire Investigation: Evidence Collection and Documentation** **Physical Training (PT)**	• How is evidence collected and analyzed? • What is the value of evidence? • What procedures are implemented at a fire/crime scene and why they are important? • Are you physically and mentally fit?	• Conduct a systematic search of a mock fire/crime scene. • Demonstrate fire/crime scene sketching. • Draw inferences and analyze fire/crime scene evidence to develop a hypothesis. • Demonstrate correct techniques to collect and package fire/crime scene evidence. • Demonstrate chain of custody and proper handling of evidence. • Identify and explain the role of the: medical examiner, CSI, first responder, forensic specialists, and photographers. • State and describe the steps in processing a fire/crime scene. • Improve fitness levels and work as a member of a cohesive unit/team.	• Written summaries on collection and documentation process and its effect on fire investigators and firefighters in the field • Anticipation Guide: Eyewitness Myths • Lab: Chain of Custody • Triangulate evidence • Lab: Crime Scene Sketch Reconstruction • Ethical Case Studies • Crime Scene Scenarios: Processing Mistakes • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practice** CRP 2,3,5,7,9,12 **Cluster Standards** LW 2,3 **Pathway Standards** LW-EFM 5,12	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S2.K1 S6.K5 HS-LS1-3.
Weeks 22-24 **Fire Investigation: Scene Preservation, Cause Determination** **Physical Training (PT)**	• How is arson investigated? • What is an accelerant? • What are signs of arson? • Are explosives treated differently from other incendiary devices? • Are you physically and mentally fit?	• Outline the systemic process of an arson investigation, including evidence collection and preservation. • Identify signs of arson, cite the primary motives for arson and examine the use of accelerants. • Identify commonly used explosives and compare and contrast different types. • Clarify the difference between fire and explosions. • Examine the information provided by smoke and fire color.	• Identify explosives in a laboratory • Summary of field visit to recent fire scene with SFD arson investigators • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practice** CRP 2,3,5,7,9,12 **Cluster Standards** LW 2,3 **Pathway Standards** LW-EFM 5,12	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S2.K1 S6.K5 HS-LS1-3.

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
		• Explain the importance of point of origin and discuss burn patterns examples • Improve fitness levels and work as a member of a cohesive unit/team.			
Weeks 25-27 **Fire Investigation: Methods of Preserving a Fire Scene** **Physical Training (PT)**	• How can firefighters help to preserve a fire scene, when their main priority is life and property safety? • What is meant by the term overhaul? • What are the best methods of fire scene preservation? • What arson indicators should a firefighter look for when battling blazes? • Are you physically and mentally fit?	• Examine methods of preserving physical evidence. • Explain how to overcome the destruction that overhaul creates. • Differentiate hose streams that may be used to preserve a fire scene. • Demonstrate methods of continuous custody. • Improve fitness levels and work as a member of a cohesive unit/team.	• Educational/training quick reference pamphlets on ways to best preserve a fire scene to allow accurate cause determination • Weekly physical fitness training demonstrating increase from baseline achievement • Physical fitness progress evaluations	**Career Ready Practice** CRP 1,2,3,5,7,9,12 **Cluster Standards** LW 2,3 **Pathway Standards** LW-EFM 5,12	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S2.K1 S6.K5 HS-LS1-3. SI.S1.K3
Weeks 28-31 **Fire Investigation: Psychology of an Arsonist** **Physical Training (PT)**	• What are reasons people commit arson? • How can the patterns of a serial arsonist lead to their discovery? • What are the differences between a serial arsonist and a person who commits a random act of arson? • How can an investigator get to know the arsonist based on evidence left behind? • Are you physically and mentally fit?	• Explain the basics of profiling an arsonist. • Describe common motives and patterns of a serial arsonist. • Improve fitness levels and work as a member of a cohesive unit/team.	• Written response to Points of Origin: Playing with Fire by John Orr • Written debrief of guest speaker presentation on behavioral analysis and profiling. • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practice** CRP 2,3,5,7,9,12 **Cluster Standards** LW 2,3 **Pathway Standards** LW-EFM 5,12	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S2.K1 S6.K5 HS-LS1-3.
Weeks32-33 **Fire Investigation: Incendiary Devices**	• How has history informed fire investigators about the use of incendiary devices?	• Identify and describe a variety of incendiary devices and how they are used.	• Case study analysis	**Career Ready Practice** CRP 1,2,3,5,7,12	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6

Time Frame Unit of Study	Key Questions	Key Learning Targets (Students will know and be able to)	Assessment Evidence of Learning	CCTC Standards	NYS Standards
throughout History **Physical Training (PT)**	• Are you physically and mentally fit?	• Summarize historic cases using incendiary devices. • Explain the need for observation skills during fire suppression. • Improve fitness levels and work as a member of a cohesive unit/team.	• Quiz on incendiary devices • Weekly physical fitness training demonstrating increase from baseline achievement	**Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 3,4,5,12,13, 15	**Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** SIS1.K2 S2.K1 S6.K5 HS-LS1-3. HS-PS3-3.
Weeks 34-35 **Fire Investigation: Laws, Sentencing, and Expert Testimony** **Physical Training (PT)**	• What are the laws and penalties for arsonists? • Who may serve as an expert witness? • Are you physically and mentally fit?	• Explain how science is used to solve crimes. • Describe the importance of physical evidence. • List the types of evidence (eyewitness, class evidence, and physical evidence). • Explain how evidence is used to convince a jury of guilt. • Improve fitness levels and work as a member of a cohesive unit/team.	• Death by Fire Case Study • Reading: "Six Astonishing Mistakes that will Make you Rethink the Death Penalty" • Lab: Garbagology • Reading: CSI Effect • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practice** CRP 1,2,3,5,7,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 3,4,5,12,13, 15	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** SI.S1.K2 S2.K1 S6.K5 HS-LS1-3.
Weeks 36-37 **Chemical Warfare Agents and IEDs** **Physical Training (PT)**	• What are chemical warfare agents, and how are they used? • How are chemical warfare agents identified? • Are you physically and mentally fit?	• Explain why chemical warfare agents are a threat, small scale and large scale. • Identify specific events using chemical warfare. • Improve fitness levels and work as a member of a cohesive unit/team.	• Research on chemical warfare and group presentations • Receive Container Inspections certification from Saferesponse.com • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practice** CRP 1,2,3,5,7,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 3,4,5,12,13,15	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science** S2.K1 S6.K5 HS-LS1-3. HS-PS1-2,5
Weeks 38-40 **Review and Final Exam**	• Are you prepared for the final exam? • Are you physically and mentally fit?	• Prepare for Final Exam. • Improve fitness levels and work as a member of a cohesive unit/team.	• Written Final Exam • Weekly physical fitness training demonstrating increase from baseline achievement • Final Fitness Evaluation	**Career Ready Practice** CRP 1,2,3,6,8,9,11,12 **Cluster Standards** LW 2,3 **Pathway Standards** LW-EFM 1,4,5,7,10,12	**ELA** 9-10R 1,2,4,7,8,9 9-10W 2,5,6,7 9-10SL 1,2,3,4,5,6 9-10L 1,2,3,4,5,6 **Literacy** 9-10RST 1,2,4,7,8,9 9-10WHST 2,5,6,7 **Science**

Syracuse City School District
Career and Technical Education Program
Course Syllabus
FRP300: Fire Rescue 300

Program Overview

The Fire Rescue program at PSLA is designed to provide students with experience in the field of firefighting and to prepare them for the fire academy. Throughout the program, a wide range of topics will be covered including fire safety and awareness, fire suppression, firefighter survival skills, and planning for a city-wide disaster. Students will become certified in CPR and First Aid, and receive Certified First Responder (CFR)/Emergency Medical Responder (EMR) certification. The program offers job shadowing and internship experiences, the opportunity to earn college credits from OCC and credit for the completion of New York State Firefighter courses. Those successfully completing the program will earn a Regents diploma and pass an industry-based assessment to receive a technical endorsement on their diploma. Career opportunities for graduates from the program include firefighter, fire protection professional, industrial fire safety professional and fire investigator.

Course Description

Students in this course will continue to work on proficiency in firefighter skills and practice all the skills required for certification in Basic Exterior Firefighting Operations (BEFO) as outlined by the NYS Office of Fire Prevention and Control and the International Fire Service Training Association. Students will also be introduced to a few topics required for Interior Firefighting Operations (IFO) that will be a foundation for students' further training and education. Students will review CPR and First Aid training will also earn their Certified First Responder (CFR)/Emergency Medical Responder (EMR) certification. Throughout the program, students will participate as a team member in weekly physical training (PT) drills to improve their physical and mental health.

Work-Based Learning

Students will be connected with working fire rescue professionals in the community through guest speakers, Career Coaching, field trips, and job shadowing leading to further opportunities for direct job training and real-world experience. Students will create and maintain a portfolio of their work-based learning experiences throughout the program to document the development of their skills.

Pre-Requisites

FRP100: Fire Rescue 100 and FRP200: Fire Rescue 200

Course Objectives

Students will:

1. Continue to gain proficiency in fire rescue skills.
2. Demonstrate basic knowledge of the situational planning and pre-planning.
3. Increase their understanding about interacting with and educating the public.
4. Review/complete CPR & First Aid Certification.
5. Obtain Certified First Responder (CFR)/Emergency Medical Responder (EMR) Certification.

Integrated Academics

N/A

Equipment and Supplies

- **School will provide:** Textbooks and all other print material; PT Gear (2 PT T-shirts, 1 sweat suit); Class uniform (1 uniform pant, 1 uniform shirt, 1 pair shoes, 1 belt)
- **Student will provide:** N/A

Textbook

International Fire Service Training Association (IFSTA). (2018). *Essentials of Fire FIghting, 7th Edition.* Stillwater, OK: Fire Protection Publications.

Grading

20% Tests
15% Quizzes
15% Classwork
10% Homework
20% Participation
20% PT Grade

Additional Course Policies

Students must receive a standard sports physical for entry into this course. Students are required to follow all classroom and training safety rules. Students must participate in weekly Physical Training Drills.

Course Calendar

Quarter	Units of Study
1	• Orientation and Review • Fire Service and Firefighter Safety (EOFF 1) • Firefighter Personal Protective Equipment (EOFF 5) • Fire Dynamics (EOFF 4) • Portable Fire Extinguishers (EOFF 6) • Building Construction (EOFF 3) • Communications (EOFF 2) • Scene Size-Ups
2	• Ground Ladders (EOFF 8) • Ropes and Knots (EOFF 7) • Structural Search and Rescue (EOFF 10) • Analyzing the Incident (EOFF 24) • Personal Protective Equipment, Product Control, and Decontamination (EOFF 26) • Fire Origin and Cause Determination (EOFF 20)
3	• Overhaul, Property Conservation, and Scene Preservation (EOFF 15) • National Incident Management System-Incident Command Structure (EOFF 27) • NIMS 700 and NIMS 100 Review • Fire Hose (EOFF 12) • Fire Suppression (EOFF 14) • Forcible Entry (EOFF 9) • Tactical Ventilation (EOFF 11) • Hose Operations and Hose Streams (EOFF 13) • Fire Suppression (EOFF 14) Review • Vehicle Fires • Survival Skills
4	• Incident Scene Operations (EOFF 19) • Action Options and Response Objectives (EOFF 25) • Structural Fire Skill Review • Testing • First Aid Provider (EOFF 23) • OSHA Certification • Civil Service Test Prep • Review and Final Exam

- Physical Training (PT) continues throughout the year

Syracuse City School District
Career and Technical Education Program
Scope and Sequence
FRP300: Fire Rescue 300

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Weeks 1-2 **Orientation and Review** **Fire Service and Firefighter Safety (EOFF 1)**	• What are the classroom expectations? • What is the mission of the fire service? • How are fire departments organized? • What are the various specializations within the fire service? • What fire department SOPs, rules, and regulations affect a fire fighter? • How do fire departments interact with other organizations and agencies? • What are the roles and duties of a fire fighter? • What fire and life safety initiatives are aimed at reducing firefighter illnesses, injuries, and fatalities? • What are the general guidelines for operating safely at structural fire scenes?	1. Explain the mission of the fire service. [NFPA 1001, 4.1.1] 2. Describe how fire departments are organized. [NFPA 1001, 4.1.1] 3. Describe the various specializations within the fire service. [NFPA 1001, 4.1.1] 4. Describe fire department SOPs, rules, and regulations that affect a Fire Fighter I. [NFPA 1001, 4.1.1, 4.1.2] 5. Explain ways that fire departments may interact with other organizations and agencies. [NFPA 1001, 4.1.1] 6. Explain the roles and duties of a Fire Fighter I. [NFPA 1001, 4.1.1] 7. Describe fire and life safety initiatives aimed at reducing firefighter illnesses, injuries, and fatalities. [NFPA 1001, 4.1.1] 8. Describe the aspects of NFPA 1500 related to firefighter safety and health. [NFPA 1001, 4.1.1] 9. Describe fire department programs intended to reduce firefighter illnesses, injuries, and fatalities. [NFPA 1001, 4.1.1, 4.3.10] 10. Summarize general guidelines for operating safely at structural fire scenes. [NFPA 1001, 4.3.3] 11. Summarize safe practices for riding in fire service vehicles and apparatus. [NFPA 1001, 4.3.2, 4.3.3] 12. Explain the use of emergency scene lighting and equipment. [NFPA 1001, 4.3.17]	• Officer Applications, • Lab Safety Contracts, • Class Contracts, • Remind, Canvas • Skills based tests on equipment use/handling • SS (Skill Sheet) 1-1: Mount and dismount an apparatus for incident response. [NFPA 1001, 4.3.2, 4.3.3] • SS 1-2: Deploy and operate a portable electrical power supply unit. [NFPA 1001, 4.3.17] • SS 1-3: Deploy lighting equipment. [NFPA 1001, 4.3.17] • SS 1-4: Demonstrate scene management at a roadway incident using traffic and scene control devices. [NFPA 1001, 4.3.3]	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3,4,5,6 **Pathway Standards** LW-EFM 1,3,4,5,6,10	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	• What are safe practices for riding in fire service vehicles and apparatus? • What is the importance of personnel accountability systems? • What are the guidelines for operating safely at highway and roadway incidents?	13. Explain the importance of personnel accountability systems. [NFPA 1001, 4.2.4, 4.3.5] 14. Summarize general guidelines for operating safely at highway/roadway incidents. [NFPA 1001, 4.3.3] --- • Identify and describe the uses of classroom equipment. • Demonstrate the safe and proper use and handling of equipment in the fire rescue classroom.			
Week 3 **Firefighter Personal Protective Equipment (EOFF 5)** **Physical Training (PT)**	What are the types and uses of personal protective equipment (PPE) worn by firefighters? How is PPE inspected, cleaned and maintained? What are the conditions that require the use of respiratory protection equipment? What the components of SCBA (Self-Contained Breathing Apparatus? What are the limitations of SCBA? What are the procedures for donning and doffing SCBA? What are safety considerations for working in and exiting a hazardous atmosphere while wearing SCBA?	1. Describe the various types and uses of personal protective equipment (PPE) worn by firefighters. [NFPA 1001, 4.1.1, 4.3.2, 4.3.3] 2. Describe the inspection, cleaning, and maintenance of PPE. [NFPA 1001, 4.1.2] 3. Describe conditions that require the use of respiratory protection equipment. [NFPA 1001, 4.3.1] 4. Identify SCBA components. [NFPA 1001, 4.3.1] 5. Describe SCBA limitations. [NFPA 1001, 4.3.1] 6. Describe the procedures for donning and doffing SCBA. [NFPA 1001, 4.3.1] 7. Explain the process of inspecting and cleaning SCBA. [NFPA 1001, 4.5.1] 8. Describe methods of refilling, replacing, and storing SCBA cylinders. [NFPA 1001, 4.3.1, 4.5.1] 9. Describe safety considerations for working in and exiting a hazardous	• Skills based tests on equipment use/handling • SS 5-1: Don structural PPE. [NFPA 1001, 4.1.2] • SS 5-2: Don SCBA. [NFPA 1001, 4.3.1] • SS 5-3: Don SCBA while seated. [NFPA 1001, 4.3.1] • SS 5-4: Doff personal protective equipment, including SCBA, and prepare for reuse. [NFPA 1001, 4.1.2, 5.3.3] • SS 5-5: Inspect SCBA. [NFPA 1001, 4.5.1] • SS 5-6: Clean and sanitize SCBA. [NFPA 1001, 4.5.1] • SS 5-7: Fill an SCBA cylinder. [NFPA 1001, 4.3.1] • SS 5-8: Replace an SCBA cylinder. [NFPA 1001, 4.3.1] • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,3,5,6,10	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
		atmosphere while wearing SCBA. [NFPA 1001, 4.3.1] --- • Improve fitness levels and work as a member of a cohesive unit/team.			
Weeks 4-5 **Fire Dynamics (EOFF 4)** **Physical Training (PT)**	What are the basic principles of fire science? How does thermal energy impact fire behavior? What is the function of fuel within the combustion process? What is the function of oxygen within the combustion process? What is the self-sustained chemical reaction involved in flaming combustion? What are the stages of fire development? How can firefighting operations influence fire behavior in a structure? How does building construction and layout affect fire development?	1. Explain the basic principles of fire science. [NFPA 1001, 4.3.11] 2. Describe how thermal energy impacts fire behavior. [NFPA 1001, 4.3.11, 4.3.12] 3. Explain the function of fuel within the combustion process. [NFPA 1001, 4.3.10, 4.3.11] 4. Explain the function of oxygen within the combustion process. [NFPA 1001, 4.3.11] 5. Explain the self-sustained chemical reaction involved in flaming combustion. [NFPA 1001, 4.3.11] 6. Differentiate among the stages of fire development. [NFPA 1001, 4.3.11, 4.3.12] 7. Explain how firefighting operations can influence fire behavior in a structure. [NFPA 1001, 4.3.11] 8. Describe how building construction and layout affects fire development. [NFPA 1001, 4.3.10, 4.3.11] --- • Improve fitness levels and work as a member of a cohesive unit/team.	• Fire Labs • Skills based tests on equipment use/handling • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,3,5,6	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**
Week 6 **Portable Fire Extinguishers (EOFF 6)** **Physical Training (PT)**	What are the five classifications of portable fire extinguishers? What are the various types of portable fire extinguishers? What is the process of selecting and using a portable fire extinguisher?	1. Distinguish among the five classifications of portable fire extinguishers. [NFPA 1001, 4.3.16] 2. Distinguish among the various types of portable fire extinguishers. [NFPA 1001, 4.3.16] 3. Describe the process of selecting and using a portable fire extinguisher. [NFPA 1001, 4.3.16] ---	• Skills based tests on equipment use/handling • SS 6-1: Extinguish an incipient Class A, B, or C fire with a portable fire extinguisher. [NFPA 1001, 4.3.16]	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,10	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
		• Improve fitness levels and work as a member of a cohesive unit/team.	• Weekly physical fitness training demonstrating increase from baseline achievement		
Weeks 7-8 **Building Construction (EOFF 3)** **Physical Training (PT)**	What are different types of building construction? How are floors, ceilings, and walls constructed? How can basements and stairs impact firefighting operations? How are different roof types constructed? How are different types of doors constructed and operated? How are different types of windows constructed and operated?	1. Differentiate among types of building construction. [NFPA 1001, 4.3.12] 2. Describe the construction of floors, ceilings, and walls. [NFPA 1001, 4.3.4, 4.3.12] 3. Explain how basements and stairs may impact firefighting operations. [NFPA 1001, 4.3.12] 4. Compare the construction of different roof types. [NFPA 1001, 4.3.12] 5. Describe the construction and operation methods of different types of doors. [NFPA 1001, 4.3.4] 6. Describe the construction and operation methods of different types of windows. [NFPA 1001, 4.3.4] --- • Improve fitness levels and work as a member of a cohesive unit/team.	• Skills based tests on equipment use/handling • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,3,5,6,10	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**
Week 9 **Communications (EOFF 2)** **Scene Size-Ups** **Physical Training (PT)**	What are the procedures for receiving nonemergency calls? What types of communications systems and equipment are used to receive and process emergency calls? What are the procedures for receiving and dispatching emergency calls? What radio equipment and procedures are used for internal fire department communications?	1. Explain the procedures for receiving nonemergency calls. [NFPA 1001, 4.2.2] 2. Describe the types of communications systems and equipment used to receive and process emergency calls. [NFPA 1001, 4.2.1] 3. Explain the procedures for receiving and dispatching emergency calls. [NFPA 1001, 4.2.1] 4. Describe radio equipment and procedures used for internal fire department communications. [NFPA 1001, 4.2.1, 4.2.2, 4.2.3]	• Skills based tests on equipment use/handling • SS 2-1: Handle emergency and nonemergency phone calls. [NFPA 1001, 4.2.1, 4.2.2] • SS 2-2: Use a portable radio for routine and emergency traffic. [NFPA 1001, 4.2.1, 4.2.3] • Size Up Activity • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,10	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	What information needs to be gathered for a scene size-up?	---------- • Describe the types of information that needs to be gathered for a scene size-up. • Improve fitness levels and work as a member of a cohesive unit/team.			
Weeks 10-11 **Ground Ladders (EOFF 8)** **Physical Training (PT)**	What are the parts of a ladder? What are the different types of ladders? What is the process of cleaning, inspecting, and maintaining a ladder? What are safe practices for using ladders? What is the process of carrying a ladder? What is the proper procedure for placing a ground ladder? What are ways to secure a ground ladder? What are methods for raising and lowering a ladder? What are the methods to safely work from a ladder? What are methods to assist a victim down a ladder?	1. Identify the parts of a ladder. [NFPA 1001, 4.3.6] 2. Differentiate among types of ladders. [NFPA 1001, 4.3.6, 4.3.11, 4.3.12] 3. Describe the process of cleaning, inspecting, and maintaining a ladder. [NFPA 1001, 4.5.1] 4. Describe safe practices for using ladders. [NFPA 1001, 4.3.6, 4.3.11, 4.3.12] 5. Describe the process of carrying a ladder. [NFPA 1001, 4.3.6, 4.3.11, 4.3.12] 6. Describe the proper procedure for placing a ground ladder. [NFPA 1001, 4.3.6, 4.3.9, 4.3.11, 4.3.12] 7. Describe ways to secure a ground ladder. [NFPA 1001, 4.3.6] 8. Describe methods for raising and lowering a ladder. [NFPA 1001, 4.3.6, 4.3.11, 4.3.12] 9. Describe how to safely work from a ladder. [NFPA 1001, 4.3.9, 4.3.10, 4.3.11, 4.3.12] 10. Describe methods to assist a victim down a ladder. [NFPA 1001, 4.3.9] ---------- • Improve fitness levels and work as a member of a cohesive unit/team.	• Skills based tests on equipment use/handling • SS 8-1: Clean, inspect, and maintain a ladder. [NFPA 1001, 4.5.1] • SS 8-2: Carry a ladder using the one-firefighter low-shoulder method. [NFPA 1001, 4.3.6, 4.3.11, 4.3.12] • SS 8-3: Carry a ladder using a two-firefighter carry. [NFPA 1001, 4.3.6, 4.3.11, 4.3.12] • SS 8-4: Raise and lower a ladder using a one-firefighter method. [NFPA 1001, 4.3.6, 4.3.11, 4.3.12] • SS 8-5: Raise and lower a ladder using a two-firefighter method. [NFPA 1001, 4.3.6, 4.3.11, 4.3.12] • SS 8-6: Reposition a ladder. [NFPA 1001, 4.3.6, 4.3.11, 4.3.12] • SS 8-7: Leg lock on a ground ladder. [NFPA 1001, 4.3.9, 4.3.11, 4.3.12] • SS 8-8: Deploy a roof ladder on a pitched roof. [NFPA 1001, 4.3.12] • SS 8-9: Assist a victim down a ground ladder. [NFPA 1001, 4.3.9]	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,10	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
			• Weekly physical fitness training demonstrating increase from baseline achievement		
Weeks 12-13 **Ropes and Knots (EOFF 7)** **Physical Training (PT)**	What is the difference between life safety rope and utility rope? What are the various materials and methods used to construct ropes? What are the procedures for inspecting, cleaning, and maintaining ropes? How is webbing used, inspected, maintained, and stored? What are different types of knots? What is the procedure for hoisting various tools and equipment? How are ropes and knots used during rescues and at other emergencies?	1. Differentiate between life safety rope and utility rope. [NFPA 1001, 4.3.20] 2. Describe the various materials and methods used to construct ropes. [NFPA 1001, 4.3.20] 3. Describe the procedures for inspecting, cleaning, and maintaining ropes. [NFPA 1001, 4.3.20, 4.5.1] 4. Describe how webbing is used, inspected, maintained, and stored. [NFPA 1001, 4.5.1] 5. Identify types of knots. [NFPA 1001, 4.3.20] 6. Describe the procedure for hoisting various tools and equipment. [NFPA 1001, 4.1.2, 4.3.20] 7. Explain how ropes and knots are used during rescues and at other emergencies. [NFPA 1001, 4.3.3, 4.3.9] --- • Improve fitness levels and work as a member of a cohesive unit/team.	• Rope Activities • Skills based tests on equipment use/handling • SS 7-1: Inspect, clean, and store rope. [NFPA 1001, 4.5.1] • SS 7-2: Tie an overhand knot. [NFPA 1001, 4.3.20] • SS 7-3: Tie a clove hitch. [NFPA 1001, 4.3.20] • SS 7-4: Tie a clove hitch around an object. [NFPA 1001, 4.3.20] • SS 7-5: Tie a figure-eight knot. [NFPA 1001, 4.3.20] • SS 7-6: Tie a figure-eight on a bight. [NFPA 1001, 4.3.20] • SS 7-7: Tie a figure-eight follow through. [NFPA 1001, 4.3.20] • SS 7-8: Tie a water knot. [NFPA 1001, 4.3.20] • SS 7-9: Hoist an axe. [NFPA 1001, 4.3.20] • SS 7-10: Hoist a pike pole. [NFPA 1001, 4.3.20] • SS 7-11: Hoist a roof ladder. [NFPA 1001, 4.3.20] • SS 7-12: Hoist a dry hoseline. [NFPA 1001, 4.3.20] • SS 7-13: Hoist a power saw. [NFPA 1001, 4.3.20] • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,10	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**
Weeks 14-16				**Career Ready Practices**	**ELA**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Structural Search and Rescue (EOFF 10) **Physical Training (PT)**	What are best practices to ensure firefighter survival during interior operations? What are air-monitoring operations? What are structural search and rescue operations? What are victim removal methods? What are MAYDAY protocols? What are emergency evacuation methods? What are rapid intervention crew equipment and duties?	1. Explain best practices to ensure firefighter survival during interior operations. [NFPA 1001, 4.2.4, 4.3.5, 4.3.9] 2. Describe air-monitoring operations. [NFPA 1001, 4.3.21] 3. Describe structural search and rescue operations. [NFPA 1001, 4.3.5, 4.3.9] 4. Describe victim removal methods. [NFPA 1001, 4.2.4, 4.3.5, 4.3.9] 5. Describe MAYDAY protocols. [NFPA 1001, 4.2.4, 4.3.5] 6. Describe emergency evacuation methods. [NPFA 1001, 4.2.4, 4.3.1, 4.3.5, 4.3.9] 7. Describe rapid intervention crew equipment and duties. [NPFA 1001, 4.3.9] --- • Improve fitness levels and work as a member of a cohesive unit/team.	• Mannequins, Gear, Flashlights, Radios • Skills based tests on equipment use/handling • SS 10-1: Enact the proper procedures for an SCBA air emergency. [NFPA 1001, 4.2.4, 4.3.1] • SS 10-2: Operate an air-monitoring device. [NFPA 1001, 4.3.21] • SS 10-3: Conduct a primary or secondary search. [NFPA 1001, 4.3.9] • SS 10-4: Perform the incline drag. [NFPA 1001, 4.3.9] • SS 10-5: Perform the extremities lift/carry using the two-rescuer method. [NFPA 1001, 4.3.9] • SS 10-6: Perform the webbing drag. [NFPA 1001, 4.3.9] • SS 10-7: Transmit a MAYDAY report. [NFPA 1001, 4.2.4] • SS 10-8: Follow a hoseline or search line out as a withdrawal procedure. [NFPA 001, 4.2.4, 4.3.5] • SS 10-9: Perform reduced profile maneuvers without removal of SCBA using the side technique. [NFPA 1001, 4.3.1, 4.3.5, 4.3.9] • SS 10-10: Breach an interior wall. [NFPA 1001, 4.3.5, 4.3.9] • SS 10-11: Perform reduced profile maneuvers without removal of SCBA using the SCBA-first technique. [NFPA 1001, 4.3.1, 4.3.5, 4.3.9]	CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,10	11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
			• SS 10-12: Disentangle from debris or wires. [NFPA 1001, 4.3.5, 4.3.9] • Weekly physical fitness training demonstrating increase from baseline achievement		
Week 17 **Analyzing the Incident (EOFF 24)** **Physical Training (PT)**	What is the APIE (Assessment, Planning, Implementing and Evaluating) process at hazardous materials incidents? What is a hazardous materials incident? What are ways that hazardous materials harm people? What are states of matter as they relate to hazardous materials? What are the physical properties that aid in identifying potential hazards and predicting behavior of hazardous materials? What are the chemical properties that aid in identifying potential hazards and predicting behavior of hazardous materials? What is the role of the General Hazardous Materials Behavior Model in predicting the behavior of containers? What are the seven clues to the presence of hazardous materials? How do preincident plans, occupancy types, and	1. Explain the APIE process at hazardous materials incidents. [NFPA 1001, 4.1, 5.1; NFPA 1072, 5.3.1] 2. Define a hazardous materials incident. [NFPA 1001, 4.1, 5.1; NFPA 1072, 4.2.1] 3. Recognize ways that hazardous materials harm people. [NFPA 1001, 4.1, 5.1; NFPA 1072, 4.2.1] 4. Identify states of matter as they relate to hazardous materials. [NFPA 1001, 4.1, 5.1; NFPA 1072, 5.2.1] 5. Explain physical properties that aid in identifying potential hazards and predicting behavior of hazardous materials. [NFPA 1001, 4.1, 5.1; NFPA 1072, 5.2.1] 6. Explain chemical properties that aid in identifying potential hazards and predicting behavior of hazardous materials. [NFPA 1001, 4.1, 5.1; NFPA 1072, 4.2.1, 5.2.1] 7. Explain the role of the General Hazardous Materials Behavior Model in predicting the behavior of containers. [NFPA 1001, 4.1, 5.1; NFPA 1072, 5.2.1] 8. Identify the seven clues to the presence of hazardous materials. [NFPA 1001, 4.1, 5.1; NFPA 1072, 4.2.1]	• FEMA Accounts • FEMA Certification • Skills based tests on equipment use/handling • SS 24-1: Analyze a hazardous materials scenario to identify potential hazards. [NFPA 1001, 4.1, 5.1; NFPA 1072, 5.2.1] • SS 24-2: Identify indicators and hazards present at a hazardous materials incident using approved reference sources. [NFPA 1001, 4.1, 5.1; NFPA 1072, 4.2.1] • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,9,10,11	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	locations indicate the presence of hazardous materials? What are general container types and their associated behaviors and hazards? What are ways that transportation placards, labels, and markings indicate the presence and hazards of hazardous materials? What are the hazard classes? What are other markings and colors that indicate the presence of hazardous materials? What are ways that written resources are used to identify hazardous materials and their hazards?	9. Explain how preincident plans, occupancy types, and locations may indicate the presence of hazardous materials. [NFPA 1001, 4.1, 5.1; NFPA 1072, 4.2.1] 10. Recognize general container types and their associated behaviors and hazards. [NFPA 1001, 4.1, 5.1; NFPA 1072, 4.2.1, 5.2.1] 11. Describe ways that transportation placards, labels, and markings indicate the presence and hazards of hazardous materials. [NFPA 1001, 4.1, 5.1; NFPA 1072, 4.2.1] 12. Define the hazard classes. [NFPA 1001, 4.1, 5.1; NFPA 1072, 5.2.1] 13. Identify other markings and colors that indicate the presence of hazardous materials. [NFPA 1001, 4.1, 5.1; NFPA 1072, 4.2.1] 14. Describe ways that written resources are used to identify hazardous materials and their hazards. [NFPA 1001, 4.1, 5.1; NFPA 1072, 4.2.1] --- • Improve fitness levels and work as a member of a cohesive unit/team.			
Week 18 **Personal Protective Equipment, Product Control, and Decontamination (EOFF 26)** **Physical Training (PT)**	What respiratory protection is used at hazardous materials incidents? What types of protective clothing is worn at hazardous materials incidents? What personal protective equipment ensembles are used during hazardous materials incidents? What are PPE-related stresses?	1. Describe respiratory protection used at hazardous materials incidents. [NFPA 1072, 5.3.1, 5.4.1, 6.2.1] 2. Describe types of protective clothing worn at hazardous materials incidents. [NFPA 1072, 5.3.1, 5.4.1, 6.2.1] 3. Describe personal protective equipment ensembles used during hazardous materials incidents. [NFPA 1072, 5.3.1, 5.4.1, 6.2.1, 6.6.1]	• HazMat Project • Skills based tests on equipment use/handling • SS 26-1: Select appropriate PPE to address a hazardous materials scenario. [NFPA 1072, 5.2.1, 5.4.1, 5.5.1, 6.6.1] • SS 26-2: Don, work in, and doff a Level C ensemble. [NFPA 1072, 5.2.1, 5.4.1, 5.5.1, 6.6.1] • SS 26-3: Don, work in, and doff liquid splash-protective	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,9,10,11	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	What are the procedures for safely using PPE? What are the procedures for inspection, storage, testing, maintenance, and documentation of PPE? What are the methods of spill control? What are the methods of leak control? What is the difference between gross decontamination and emergency decontamination?	4. Explain PPE-related stresses. [NFPA 1072, 5.4.1, 6.2.1] 5. Describe procedures for safely using PPE. [NFPA 1072, 5.4.1, 5.5.1, 5.6.1, 6.2.1] 6. Identify procedures for inspection, storage, testing, maintenance, and documentation of PPE. [NFPA 1072, 6.2.1] 7. Describe methods of spill control. [NFPA 1072, 6.6.1] 8. Describe methods of leak control. [NFPA 1072, 6.6.1] 9. Differentiate between gross decontamination and emergency decontamination. [NFPA 1072, 5.3.1, 5.4.1, 5.5.1, 6.2.1] --- • Improve fitness levels and work as a member of a cohesive unit/team.	clothing. [NFPA 1072, 5.2.1, 5.4.1, 5.5.1, 6.6.1] • SS 26-4: Don, work in, and doff vapor-protective clothing. [NFPA 1072, 5.2.1, 5.4.1, 5.5.1, 6.6.1] • SS 26-5: Perform absorption/adsorption. [NFPA 1072, 6.6.1] • SS 26-6: Perform damming. [NFPA 1072, 6.6.1] • SS 26-7: Perform diking operations. [NFPA 1072, 6.6.1] • SS 26-8: Perform diversion. [NFPA 1072, 6.6.1] • SS 26-9: Perform retention. [NFPA 1072, 6.6.1] • SS 26-10: Perform vapor suppression. [NFPA 1072, 6.6.1] • SS 26-11: Perform vapor dispersion. [NFPA 1072, 6.6.1] • SS 26-12: Perform dilution. [NFPA 1072, 6.6.1] • SS 26-13: Perform remote valve shutoff or activate emergency shutoff device. [NFPA 1072, 6.6.1] • SS 26-14: Perform gross decontamination. [NFPA 1072, 5.4.1, 6.2.1] • SS 26-15: Perform emergency decontamination. [NFPA 1072, 5.5.1, 6.2.1] • Weekly physical fitness training demonstrating increase from baseline achievement		
Week 19	• What are the roles and responsibilities of	1. Identify the roles and responsibilities of firefighters and	• Arson Activities	**Career Ready Practices** CRP 1,2,4,8,9,12	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Fire Origin and Cause Determination (EOFF 20) **Physical Training (PT)**	firefighters and fire investigators at a fire investigation? • What is the process of determining area of origin? • What is the process of fire cause determination? • What are some considerations related to evidence preservation?	fire investigators at a fire investigation. [NFPA 1001, 5.3.4] 2. Explain the process of determining area of origin. [NFPA 1001, 5.3.4] 3. Explain the process of fire cause determination. [NFPA 1001, 5.3.4] 4. Describe considerations related to evidence preservation. [NFPA 1001, 5.3.4] --- • Improve fitness levels and work as a member of a cohesive unit/team.	• Skills based tests on equipment use/handling • SS 20-1: Protect and document evidence of fire origin and cause. [NFPA 1001, 5.3.4] • Weekly physical fitness training demonstrating increase from baseline achievement	**Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,9,10,11	11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**
Week 20 **Overhaul, Property Conservation, and Scene Preservation (EOFF 15)** **Physical Training (PT)**	• What is overhaul? • How can property be conserved at a fire scene? • What are the duties that firefighters must perform to protect and preserve a fire scene?	1. Describe overhaul. [NFPA 1001, 4.3.8, 4.3.10, 4.3.13] 2. Explain how to conserve property at a fire scene. [NFPA 1001, 4.3.14, 4.5.1] 3. Describe the duties that firefighters must perform to protect and preserve a fire scene. [NFPA 1001, 4.3.8, 4.3.13, 4.3.14] --- • Improve fitness levels and work as a member of a cohesive unit/team.	• Skills based tests on equipment use/handling • SS 15-1: Locate and extinguish hidden fires. [NFPA 1001, 4.3.8, 4.3.10, 4.3.13] • SS 15-2: Roll a salvage cover for a one-firefighter spread. [NFPA 1001, 4.3.14] • SS 15-3: Spread a rolled salvage cover using a one-firefighter method. [NFPA 1001, 4.3.14] • SS 15-4: Fold a salvage cover for a one-firefighter spread. [NFPA 1001, 4.3.14] • SS 15-5: Spread a folded salvage cover using a one-firefighter method. [NFPA 1001, 4.3.14] • SS 15-6: Fold a salvage cover for a two-firefighter spread. [NFPA 1001, 4.3.14] • SS 15-7: Spread a folded salvage cover using the two-firefighter balloon throw. [NFPA 1001, 4.3.14] • SS 15-8: Construct and place a water chute. [NFPA 1001, 4.3.14]	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,9,10,11	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
			• SS 15-9: Construct a catchall. [NFPA 1001, 4.3.14] • SS 15-10: Construct a water chute and attach it to a catchall. [NFPA 1001, 4.3.14] • SS 15-11: Cover building openings to prevent damage after fire suppression. [NFPA 1001, 4.3.14] • SS 15-12: Clean, inspect, and repair a salvage cover. [NFPA 1001, 4.5.1] • Weekly physical fitness training demonstrating increase from baseline achievement		
Weeks 21-22 **National Incident Management System-Incident Command Structure (EOFF 27)** **NIMS 700 and NIMS 100 Review** **Physical Training (PT)**	• What is the function of each section within the NIMS-ICS organizational structure? • What is the process of establishing and transferring command of an incident? • What are the traits and values of an effective leader? • How are incidents managed? • How is an Incident Action Plan used? • What are the key concepts, principles, scope, and applicability underlying NIMS? • What are some activities and methods for managing resources? • What are the characteristics of NIMS Management?	1. Describe the function of each section within the NIMS-ICS organizational structure. [NFPA 1001, 4.1; NFPA 1072, 5.4.1] 2. Explain the process of establishing and transferring command of an incident. [NFPA 1072, 5.4.1] 3. Identify the traits and values of an effective leader. [NFPA 1072, 5.4.1] 4. Explain how incidents are managed. [NFPA 1001, 5.1; NFPA 1072, 5.4.1] 5. Describe the use of an Incident Action Plan. [NFPA 1072, 5.4.1] 6. Describe and identify key concepts, principles, scope, and applicability underlying NIMS. (NIMS 700) 7. Describe activities and methods for managing resources. (NIMS 700) 8. Describe NIMS Management characteristics. (NIMS 700) 9. Identify and describe Incident Command System (ICS)	• FEMA Accounts • Skills based tests on equipment use/handling • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,9,10,11	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	• What are the organizational structures of the Incident Command System (ICS)? • What are the functions, common models for staff organization, and activation levels of the Emergency Operations Center (EOC)? • How are the NIMS Management and other coordination structures interconnected? • What are the characteristics of communications and information systems, effective communication, incident information, and communication standards and formats? • What are the ICS functional areas and the roles of the Incident Commander and Command Staff? • What are the General Staff roles within ICS? • How do the NIMS Management Characteristics apply to ICS for a variety of roles and discipline areas?	organizational structures. (NIMS 700) 10. Explain Emergency Operations Center (EOC) functions, common models for staff organization, and activation levels. (NIMS 700) 11. Explain the interconnectivity within the NIMS Management and Coordination structures: ICS, EOC, Joint Information Systems (JIS), and Multiagency Coordination Groups (MAC Groups). (NIMS 700) 12. Identify and describe the characteristics of communications and information systems, effective communication, incident information, and communication standards and formats. (NIMS 700) 13. Explain the principles and basic structure of the Incident Command System (ICS). (NIMS 100) 14. Describe the NIMS Management Characteristics that are the foundation of the ICS. (NIMS 100) 15. Describe the ICS functional areas and the roles of the Incident Commander and Command Staff. (NIMS 100) 16. Identify the General Staff roles within ICS. (NIMS 100) 17. Identify how the NIMS Management Characteristics apply to ICS for a variety of roles and discipline areas. (NIMS 100) --- • Improve fitness levels and work as a member of a cohesive unit/team.			
Week 23 **Fire Hose (EOFF 12)**	• What are the characteristics of fire hose? • How is fire hose inspected, cared for and maintained?	1. Describe characteristics of fire hose. [NFPA 1001, 4.3.8]	• Skills based tests on equipment use/handling	**Career Ready Practices** CRP 1,2,4,8,9,12	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Physical Training (PT)	• What are different methods of rolling hose? • What are hose loads?	2. Describe the inspection, care, and maintenance of fire hose. [NFPA 1001, 4.5.2] 3. Explain methods of rolling hose. [NFPA 1001, 4.5.2] 4. Describe hose loads. [NFPA 1001, 4.5.2] --- • Improve fitness levels and work as a member of a cohesive unit/team.	• SS 12-1: Couple and uncouple a hose. [NFPA 1001, 4.3.10] • SS 12-2: Inspect, clean, and maintain a hose. [NFPA 1001, 4.5.2] • SS 12-3: Make a straight hose roll. [NFPA 1001, 4.5.2] • SS 12-4: Make a donut hose roll. [NFPA 1001, 4.5.2] • SS 12-5: Make a flat hose load. [NFPA 1001, 4.5.2] • SS 12-6: Make the accordion hose load. [NFPA 1001, 4.5.2] • SS 12-7: Make the preconnected flat hose load. [NFPA 1001, 4.5.2] • SS 12-8: Make the triple layer hose load. [NFPA 1001, 4.5.2] • SS 12-9: Make the minuteman hose load. [NFPA 1001, 4.5.2] • Weekly physical fitness training demonstrating increase from baseline achievement	**Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,10	**Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**
Week 24 **Fire Suppression (EOFF 14)** **Physical Training (PT)**	• What is the science behind fire suppression? • What are the methods for suppressing structural fires? • What is the role of firefighters with regards to supporting fire protection systems during fire suppression? • What are the duties of firefighters related to building utilities? • What is the process of attacking fires in exterior Class A materials?	1. Explain the science behind fire suppression. [NFPA 1001, 4.3.10, 4.3.11] 2. Describe methods for suppressing structural fires. [NFPA 1001, 4.3.8, 4.3.10, 4.3.13] 3. Explain the role of firefighters with regards to supporting fire protection systems during fire suppression. [NFPA 1001, 4.3.13, 4.3.14] 4. Explain the duties of firefighters related to building utilities. [NFPA 1001, 4.3.18] 5. Describe the process of attacking fires in exterior Class A materials. [NFPA 1001, 4.3.8]	• Skills based tests on equipment use/handling • SS 14-1: Attack an interior structure fire at ground level using a direct, indirect, or combination attack. [NFPA 1001, 4.3.10] • SS 14-2: Attack a structure fire using a transitional attack. [NFPA 1001, 4.3.10] • SS 14-3: Attack a structure fire above and below grade level using an interior attack. [NFPA 1001, 4.3.10]	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,10	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	• What is ground cover fire attack?	6. Describe ground cover fire attack. [NFPA 1001, 4.3.19] --- • Improve fitness levels and work as a member of a cohesive unit/team.	• SS 14-4: Operate sprinkler system control valves. [NFPA 1001, 4.3.14] • SS 14-5: Stop the flow of water from an activated sprinkler. [NFPA 1001, 4.3.14] • SS 14-6: Turn off building utilities. [NFPA 1001, 4.3.18] • SS 14-8: Attack a fire in exterior stacked or piled Class A materials. [NFPA 1001, 4.3.8] • SS 14-9: Attack a fire in a small unattached structure. [NFPA 1001, 4.3.8] • SS 14-10: Extinguish a fire in a trash container. [NFPA 1001, 4.3.8] • SS 14-11: Attack a ground cover fire. [NFPA 1001, 4.3.19] • SS 14-12: Construct a fire line. [NFPA 1001, 4.3.19] • Weekly physical fitness training demonstrating increase from baseline achievement		
Weeks 25 **Forcible Entry (EOFF 9)** **Physical Training (PT)**	• What are the basic principles of forcible entry? • What kind of tools are used for forcible entry? • What are the considerations for forcible entry tool safety? • How are forcible entry tools carried? • How are forcible entry tools cleaned and maintained? • What are the methods of forcing entry through doors and windows?	1. Describe the basic principles of forcible entry. [NFPA 1001, 4.3.4, 4.3.11] 2. Describe forcible entry tools. [NFPA 1001, 4.3.4, 4.3.9] 3. Explain considerations for forcible entry tool safety. [NFPA 1001, 4.3.4] 4. Explain how to carry forcible entry tools. [NFPA 1001, 4.3.4] 5. Describe how to clean and maintain forcible entry tools. [NFPA 1001, 4.5.1] 6. Describe methods of forcing entry through doors. [NFPA 1001, 4.3.4, 4.3.9, 4.3.11]	• Skills based tests on equipment use/handling • SS 9-1: Clean, inspect, and maintain hand tools and equipment. [NFPA 1001, 4.5.1] • SS 9-2: Force entry through an inward-swinging door. [NFPA 1001, 4.3.4] • SS 9-3: Force entry through an outward-swinging door. [NFPA 1001, 4.3.4] • SS 9-4: Force entry through a door lock. [NFPA 1001, 4.3.4] • SS 9-5: Force entry through a padlock. [NFPA 1001, 4.3.4]	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6.10	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	• What are the methods for breaching walls?	7. Describe methods for forcing entry through windows. [NFPA 1001, 4.3.4, 4.3.9, 4.3.11] 8. Describe methods for breaching walls. [NFPA 1001, 4.3.4, 4.3.9] --- • Improve fitness levels and work as a member of a cohesive unit/team.	• SS 9-6: Force entry through a window. [NFPA 1001, 4.3.4] • SS 9-7: Force entry through a wood-framed wall (Type V construction). [NFPA 1001, 4.3.4] • SS 9-8: Breach a masonry wall with hand tools. [NFPA 1001, 4.3.4] • SS 9-9: Breach a metal wall with a rotary saw. [NFPA 1001, 4.3.4] • Weekly physical fitness training demonstrating increase from baseline achievement		
Weeks 26 **Tactical Ventilation (EOFF 11)** **Physical Training (PT)**	• Explain why tactical ventilation is performed at a structure fire? • What are the safety considerations related to tactical ventilation? • What tools and equipment are used for ventilation? • What is horizontal ventilation? • What is vertical ventilation? • What are the considerations related to the ventilation of basements and other special compartments?	1. Explain why tactical ventilation is performed at a structure fire. [NFPA 1001, 4.3.11, 4.3.12] 2. Describe safety considerations related to tactical ventilation. [NFPA 1001, 4.3.11, 4.3.12] 3. Describe ventilation tools and equipment. [NFPA 1001, 4.3.11, 4.3.12, 4.5.1] 4. Describe horizontal ventilation. [NFPA 1001, 4.3.11] 5. Describe vertical ventilation. [NFPA 1001, 4.3.12] 6. Describe considerations related to the ventilation of basements and other special compartments. [NFPA 1001, 4.3.11, 4.3.12] --- • Improve fitness levels and work as a member of a cohesive unit/team.	• Roof Prop/ Door prop • Skills based tests on equipment use/handling • SS 11-1: Perform mechanical positive pressure ventilation. [NFPA 1001, 4.5.1, 4.3.11] • SS 11-2: Perform horizontal hydraulic ventilation. [NFPA 1001, 4.3.11] • SS 11-3: Ventilate a flat roof. [NFPA 1001, 4.3.12] • SS 11-4: Ventilate a pitched roof. [NFPA 1001, 4.3.12] • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,10	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**
Week 27 **Hose Operations and Hose Streams (EOFF 13)**	• Describe methods of supplying water for firefighting operations? • Describe methods used to deploy fire hose?	1. Describe methods of supplying water for firefighting operations. [NFPA 1001, 4.3.15]	• Skills based tests on equipment use/handling • SS 13-1: Make soft-sleeve and hard-suction hydrant	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards**	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Physical Training (PT)	• Describe methods of advancing hoselines? • Differentiate among types of hose streams and nozzles? • Explain how to operate different types of hoselines, nozzles, and master stream devices?	2. Describe methods used to deploy fire hose. [NFPA 1001, 4.3.10, 4.3.15] 3. Describe methods of advancing hoselines. [NFPA 1001, 4.3.7, 4.3.10] 4. Differentiate among types of hose streams and nozzles. [NFPA 1001, 4.3.10] 5. Explain how to operate different types of hoselines, nozzles, and master stream devices. [NFPA 1001, 4.3.7, 4.3.8, 4.3.10] --- • Improve fitness levels and work as a member of a cohesive unit/team.	connections. [NFPA 1001, 4.3.15] • SS 13-2: Connect and place a hard-suction hose for drafting from a static water source. [NFPA 1001, 4.3.15] • SS 13-3: Deploy a portable water tank. [NFPA 1001, 4.3.15] • SS 13-4: Make a hydrant connection from a forward lay. [NFPA 1001, 4.3.15] • SS 13-5: Make a reverse hose lay. [NFPA 1001, 4.3.15] • SS 13-6: Advance a hose load. [NFPA 1001, 4.3.10] • SS 13-7: Extend a hoseline. [NFPA 1001, 4.3.10] • SS 13-8: Replace a burst hoseline. [NFPA 1001, 4.3.10] • SS 13-9: Advance a charged hoseline using the working line drag method. [NFPA 1001, 4.3.7, 4.3.10] • SS 13-10: Advance a hoseline into a structure. [NFPA 1001, 4.3.10] • SS 13-11: Advance a hoseline up or down an interior stairway. [NFPA 1001, 4.3.10] • SS 13-12: Connect to a stairway or improvised standpipe and advance an attack hoseline onto a floor. [NFPA 1001, 4.3.10] • SS 13-13: Advance an uncharged line up a ladder into a window. [NFPA 1001, 4.3.10] • SS 13-14: Advance a charged attack line up a ladder into a window. [NFPA 1001, 4.3.10]	LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,10	11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
			• SS 13-15: Operate a charged attack line from a ladder. [NFPA 1001, 4.3.10] • SS 13-16: Operate a smooth bore or fog nozzle. [NFPA 1001, 4.3.7, 4.3.10] • SS 13-17: Operate a small hoseline using the one-firefighter method. [NFPA 1001, 4.3.10] • SS 13-18: Operate a large hoseline for exposure protection using the one-firefighter method. [NFPA 1001, 4.3.8] • SS 13-19: Operate a large hoseline using the two-firefighter method. [NFPA 1001, 4.3.8, 4.3.10] • SS 13-20: Deploy and operate a master stream device. [NFPA 1001, 4.3.8] • Weekly physical fitness training demonstrating increase from baseline achievement		
Weeks 28-29 **Fire Suppression (EOFF 14) Review** **Vehicle Fires** **Survival Skills** **Physical Training (PT)**	• What is the science behind fire suppression? • What are the methods for suppressing structural fires? • What is the role of firefighters with regards to supporting fire protection systems during fire suppression? • What are the duties of firefighters related to building utilities? • What is the process of attacking a vehicle fire?	1. Explain the science behind fire suppression. [NFPA 1001, 4.3.10, 4.3.11] 2. Describe methods for suppressing structural fires. [NFPA 1001, 4.3.8, 4.3.10, 4.3.13] 3. Explain the role of firefighters with regards to supporting fire protection systems during fire suppression. [NFPA 1001, 4.3.13, 4.3.14] 4. Explain the duties of firefighters related to building utilities. [NFPA 1001, 4.3.18]	• Maze/Survival Activity • Skills based tests on equipment use/handling • SS 14-1: Attack an interior structure fire at ground level using a direct, indirect, or combination attack. [NFPA 1001, 4.3.10] • SS 14-2: Attack a structure fire using a transitional attack. [NFPA 1001, 4.3.10] • SS 14-3: Attack a structure fire above and below grade level	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,10	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
	• What is the process of attacking fires in exterior Class A materials? What is ground cover fire attack?	5. Describe the process of attacking a vehicle fire. [NFPA 1001, 4.3.7] 6. Describe the process of attacking fires in exterior Class A materials. [NFPA 1001, 4.3.8] 7. Describe ground cover fire attack. [NFPA 1001, 4.3.19] --- • Improve fitness levels and work as a member of a cohesive unit/team.	using an interior attack. [NFPA 1001, 4.3.10] • SS 14-4: Operate sprinkler system control valves. [NFPA 1001, 4.3.14] • SS 14-5: Stop the flow of water from an activated sprinkler. [NFPA 1001, 4.3.14] • SS 14-6: Turn off building utilities. [NFPA 1001, 4.3.18] • SS 14-7: Attack a passenger vehicle fire. [NFPA 1001, 4.3.7] • SS 14-8: Attack a fire in exterior stacked or piled Class A materials. [NFPA 1001, 4.3.8] • SS 14-9: Attack a fire in a small unattached structure. [NFPA 1001, 4.3.8] • SS 14-10: Extinguish a fire in a trash container. [NFPA 1001, 4.3.8] • SS 14-11: Attack a ground cover fire. [NFPA 1001, 4.3.19] • SS 14-12: Construct a fire line. [NFPA 1001, 4.3.19] • Weekly physical fitness training demonstrating increase from baseline achievement		
Week 30 **Incident Scene Operations (EOFF 19)** **Physical Training (PT)**	What is the process of initiating incident operations? What is the process of transferring Command? What are the duties of a unit or team leader during fireground operations? What is the use of postincident reports?	1. Explain the process of initiating incident operations. [NFPA 1001, 5.1.1, 5.1.2, 5.3.2] 2. Explain the process of transferring Command. [NFPA 1001, 5.1.1] 3. Describe the duties of a unit or team leader during fireground operations. [NFPA 1001, 5.2.2, 5.3.2] 4. Explain the use of postincident reports. [NFPA 1001, 5.2.1] ---	• Skills based tests on equipment use/handling • SS 19-1: Establish Incident Command and coordinate interior attack of a structure fire. [NFPA 1001, 5.1.1, 5.1.2, 5.2.2, 5.3.2] • SS 19-2: Create a postincident report. [NFPA 1001, 5.2.1]	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,9,10,11	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
		• Improve fitness levels and work as a member of a cohesive unit/team.	• Weekly physical fitness training demonstrating increase from baseline achievement		
Weeks 31-33 **Action Options and Response Objectives (EOFF 25)** **Structural Fire Skill Review** **Testing** **Physical Training (PT)**	What are predetermined procedures and notification procedures? What is the role of first responders in initiating protective actions? What is the process of size-up and risk assessment? What are the different hazardous materials incident levels? What are the three modes of operation at hazardous materials incidents? What is the process of planning the initial response at hazardous materials incidents? What are ways of implementing response objectives and action options? What are different types of terrorist attacks and their associated hazards? What are the hazards at illicit laboratories? What are the characteristics of illegal hazardous materials dumps? What is the hazardous materials response during and after natural disasters? What are processes for evaluating progress at a hazardous materials incident?	1. Explain predetermined procedures and notification procedures. [NFPA 1072, 5.3.1] 2. Explain the role of first responders in initiating protective actions. [NFPA 1072, 4.4.1, 5.2.1, 5.3.1] 3. Describe the process of size-up and risk assessment. [NFPA 1072, 4.2.1, 5.2.1, 5.3.1, 5.4.1] 4. Differentiate among hazardous materials incident levels. [NFPA 1072, 5.2.1] 5. Explain the three modes of operation at hazardous materials incidents. [NFPA 1072, 5.3.1] 6. Explain the process of planning the initial response at hazardous materials incidents. [NFPA 1072, 5.3.1] 7. Explain ways of implementing response objectives and action options. [NFPA 1072, 5.4.1] 8. Differentiate among types of terrorist attacks and their associated hazards. [NFPA 1072, 4.3.1, 5.2.1] 9. Identify hazards at illicit laboratories. [NFPA 1072, 5.2.1] 10. Recognize illegal hazardous materials dumps. [NFPA 1072, 5.2.1] 11. Describe hazardous materials response during and after natural disasters. [NFPA 1072, 5.2.1] 12. Identify processes for evaluating progress at a hazardous materials incident. [NFPA 1072, 5.6.1] ----------	• Written Test • Burn Tower Activity • Skills based tests on equipment use/handling • SS 25-1: Make appropriate notifications of a hazardous materials incident. [NFPA 1072, 4.4.1] • SS 25-2: Implement protective actions at a hazardous materials incident. [NFPA 1072, 4.3.1] • SS 25-3: Provide scene control at a hazardous materials incident. [NFPA 1072, 5.4.1] • SS 25-4: Identify actions available at a hazardous materials incident. [NFPA 1072, 5.3.1] • SS 25-5: Evaluate progress made at a hazardous materials incident. [NFPA 1072, 5.6.1] • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,9,10,11	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
		• Improve fitness levels and work as a member of a cohesive unit/team.			
Week 34 **First Aid Provider (EOFF 23)** **Physical Training (PT)**	What is the role of the fire service in providing emergency medical care? What are the requirements for patient confidentiality? What are some communicable diseases that first responders commonly encounter? What are ways to prevent the spread of communicable diseases during emergency medical care? What is the process of patient assessment? What is Cardiopulmonary Resuscitation (CPR? What are the methods of controlling bleeding? What is shock management?	1. Describe the role of the fire service in providing emergency medical care. [NFPA 1001, 6.1.1, 6.1.2, 6.2.1] 2. Explain patient confidentiality requirements. [NFPA 1001, 6.1.1, 6.1.2, 6.2.1] 3. Identify communicable diseases that first responders commonly encounter. [NFPA 1001, 6.1.1, 6.1.2, 6.2.1] 4. Explain ways to prevent the spread of communicable diseases during emergency medical care. [NFPA 1001, 6.1.1, 6.1.2, 6.2.1] 5. Explain the process of patient assessment. [NFPA 1001, 6.1.1, 6.1.2, 6.2.1] 6. Describe Cardiopulmonary Resuscitation (CPR). [NFPA 1001, 6.1.1, 6.1.2 6.2.1] 7. Describe methods of controlling bleeding. [NFPA 1001, 6.1.1, 6.1.2, 6.2.1] 8. Explain shock management. [NFPA 1001, 6.1.1, 6.1.2, 6.2.1] --- • Improve fitness levels and work as a member of a cohesive unit/team.	• Cooperative Activity with EMT Props • Skills based tests on equipment use/handling • Weekly physical fitness training demonstrating increase from baseline achievement	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3 **Pathway Standards** LW-EFM 1,2,3,5,6,10	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**
Weeks 35-40 **OSHA Certification** **Civil Service Test Prep** **Review and Final Exam** **Physical**	• Are you prepared for the final exam? • Are you physically and mentally fit?	• Review cumulative content throughout the year. • Obtain OSHA Certification. • Explain the requirements for Civil Service Examinations. • Improve fitness levels and work as a member of a cohesive unit/team.	• Written Final Exam • Practical Final Exam • OSHA Certification • Civil Service Practice Test • Weekly physical fitness training demonstrating increase from baseline achievement • Final Physical Evaluation	**Career Ready Practices** CRP 1,2,4,8,9,12 **Cluster Standards** LW 1,2,3,4,5,6 **Pathway Standards** LW-EFM 1,2,3,5,6,9,10,11	**ELA** 11-12R 1,2,4,7,8,9 11-12W 1,2,5,6,7 11-12SL 1,2,3,4,5,6 11-12L 1,2,3,4,5,6 **Literacy** 11-12RST 1,2,4,7,8,9 11-12 WHST 1,2,5,6,7 **Science**

Time Frame Unit of Study	Key Questions	IFSTA Objectives Additional Objectives	Assessment Evidence of Learning	CCTC Standards	NYS Standards
Training (PT)					

Return to TOC

B. Teacher Certification

> *The self-study team reviews the teacher certification and training of the school or BOCES' instructional, paraprofessional, and support staff who deliver services within the CTE program seeking approval. New York State teacher certification review should include both CTE teachers and teachers of academic content within the proposed program.*

Process

- Reviewers confirm that all CTE teachers hold appropriate New York State teacher certification for the program in which they will teach.
- Reviewers confirm that all teachers of academic content hold appropriate New York State teacher certification for the program in which they will teach.
- Reviewers confirm the appropriate NCLB highly-qualified status for the CTE teachers in programs offering academic credit.
- Reviewers confirm that staff delivering instruction in programs where certification, licensure, or registration by an external entity have acquired the necessary credentials.
- Reviewers confirm that professional development opportunities exist within the school district or BOCES for instructional, paraprofessional, and support staff to acquire and improve skills and knowledge related to instructional enhancement of the CTE program.

Documentation

Recommendations from the review of teacher certification should be included in the self-study report and reviewed by the external committee. A list of all teachers for the program and the New York State teacher certification(s) held by each must be attached to the Application for Career and Technical Education Program Approval.

Resources

New York State Office of Teaching Initiatives
http://www.highered.nysed.gov/tcert/certificate/certprocess.htm

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

Search Results

Select	First Name	Last Name	MI	City	State	Registration Status
◉	ANTHONY	JARVIS	D	DE RUYTER	NY	Registered

View Detail

Certificate Information for New York State Teaching Certificate Holder

Certificate Title	Issue / Effective Date	Expiration Date	Status
Social Studies 7-12 Initial Certificate	09/01/2011	08/31/2016	Expired
Social Studies 7-12 Professional Certificate	03/02/2016		Issued
Emergency Medical Services 7-12 Professional Certificate	08/14/2019		Issued
Emergency Medical Services 7-12 Transitional A Certificate	05/25/2016	08/31/2019	Expired

Search Results

Select	First Name	Last Name	MI	City	State	Registration Status
◉	JOSEPH	SMITH		MANLIUS	NY	Registered Active

Certificate Information for New York State Teaching Certificate Holder

Certificate Title	Issue / Effective Date	Expiration Date	Status
Biology 7-12 Transitional B Certificate	07/02/2014	05/22/2015	Expired
Biology (Grades 5-9) Transitional B Certificate	02/01/2014	05/22/2015	Expired
Biology 7-12 Initial Certificate	05/27/2015	01/31/2021	Expired
Chemistry 7-12 Initial Certificate	09/27/2017	01/31/2023	Issued
Biology 7-12 Professional Certificate	11/30/2019		Issued
Chemistry 7-12 Professional Certificate	03/29/2019		Issued

Certified by the State of New York solely for purposes of employment by the City School District of the City of New York and the operation of the School District.

Search Results

Select	First Name	Last Name	MI	City	State	Registration Status
◉	ERIC	MANGOLD	G	JAMESVILLE	NY	Registered Active

View Detail

Certificate Information for New York State Teaching Certificate Holder

Certificate Title	Issue / Effective Date	Expiration Date	Status
English Language Arts 7-12 Initial Certificate	02/01/2008	01/31/2013	Expired
English Language Arts 7-12 Professional Certificate	02/01/2013		Issued

Certified by the State of New York solely for purposes of employment by the City School District of the City of New York and the operation of the School District.

Search Results

Select	First Name	Last Name	MI	City	State	Registration Status
◉	NICHOLAS	LISI		SYRACUSE	NY	Registered Active

View Detail

Certificate Information for New York State Teaching Certificate Holder

Certificate Title	Issue / Effective Date	Expiration Date	Status
Media Communications 7-12 Initial Certificate	09/01/2011	08/31/2016	Expired
Coordinator of Work-Based Learning Programs for Career Development Extension Initial Extension Annotation	12/19/2013	08/31/2016	Expired
Media Communications 7-12 Professional Certificate	03/17/2016		Issued
Coordinator of Work-Based Learning Programs for Career Development Extension Professional Ext/Anno	03/17/2016		Issued

C. Technical Assessments Based on Industry Standards

> *The self-study team reviews the selection of a technical assessment for the program seeking approval. The selected technical assessment must be nationally-recognized and based on industry standards. It must be available to students enrolled in the approved program and must consist of three parts: written, student demonstration, and student project. Successful completion of the technical assessment is not a requirement for high school graduation, but is required for a student to earn a technical endorsement on the high school diploma*
>
> *The New York State Education Department does not approve, endorse, or certify any technical assessment.*

Process

- The school district or BOCES selects an appropriate industry standard technical assessment to measure student proficiency in the technical field for the program. The school district or BOCES may select a New York State licensing examination as the technical assessment.
- The school district or BOCES determines the scheduling and administration of technical assessments. It is not required that the technical assessment be administered at the conclusion of the program. Parts may be administered throughout a student's learning experience.
- The school district or BOCES determines the number of times a student may take a particular technical assessment.
- The school district or BOCES must comply with existing laws and regulations related to administration of technical assessments to students with disabling conditions and provide appropriate testing modifications. Restrictions on student eligibility for testing are the responsibility of the test producer.
- In the absence of an appropriate nationally-recognized industry standard based assessment, a consortium of local, regional, state, business and industry representatives may be formed to produce such an instrument.
    - Technical assessments must meet generally recognized psychometric criteria. Therefore, the consortium approach may be expensive because of the many steps required to insure assessment validity, reliability, and security.
    - An existing CTE advisory committee or craft committee is not a technical assessment consortium. The school district or BOCES must ensure that the assessment consortium adequately represents current business and industry standards for the specific career area for the program.
- Where an appropriate technical assessment exists, but consists of only one or two parts, a consortium must be formed to develop the missing part(s).
- The school district or BOCES must develop a system to collect student-level and program-level data on performance on the technical assessment.

Documentation

Recommendations on the technical assessment selection should be included in the self-study report and reviewed by the external committee.

Resources

New York State graduation requirements: http://www.emsc.nysed.gov/part100/pages/1005.html

Information on the Technical Endorsement: http://www.emsc.nysed.gov/cte/ctepolicy/endorsement.html

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

Return to TOC

Fire Science

EXAM INFORMATION

Exam Number

5210

Items100

Points100

Prerequisites

NONE

Recommended Course Length

ONE YEAR

National Career Cluster

LAW, PUBLIC SAFETY, CORRECTIONS, & SECURITY

Performance Standards

INCLUDED (OPTIONAL)

Certificate AvailableYES

DESCRIPTION

Fire science is a foundational course in the fire science pathway; it is recommended for high school students in grades 11 and 12. The course provides a basis for students to earn the BOF certification after high school, when they meet minimum age requirements, complete additional course work, and are employed/affiliated with the fire service. The class also lays the groundwork for students wishing to pursue post-secondary education in fire science. Students enrolled in this course willhave the opportunity to obtain American Heart Association healthcareprovider CPR certification. Major course topics include; orientation and organization, fire behavior, building construction, safety, communication, self-contained breathing apparatus (SCBA), extinguishers, ladders, hose and appliances, nozzles and streams, andwater supply.

EXAM BLUEPRINT

STANDARD	PERCENTAGE OF EXAM
1- Orientations & Organization	10%
2- Fire Behavior	15%
3- Building Construction	15%
4- Safety	15%
5- Communications	5%
6- SCBA	15%
7- Extinguishers	5%
8- Ladders	5%
9- Hose & Appliances	5%
10- Nozzles & Streams	5%
11- Water Supply	5%

STANDARD 1

Students will understand orientation and organization.

Objective 1 Identify the organization of the fire department.

1. Organizational Principles:
    1. Unity of Command (Chain of Command)
    2. Span of Control
    3. Division of Labor
    4. Discipline
2. Organization charts showing (chain of command)
    1. Fire department organizational structure
3. ICS, Incident Command System
    1. Incident organizational structure
4. Fire Companies Functions:
    1. Engine
    2. Truck
    3. Rescue Squad/Company
    4. Brush Company
    5. Haz-Mat
    6. EMS
    7. Special Rescue

Objective 2 Identify the basic firefighter's role as a member of the fire service.

1. Firefighter Roles:
    1. Volunteer
    2. Paid-on-call
    3. Career
    4. Combination
    5. Federal and Military
    6. Private
2. Fire Companies Roles:
    1. Engine
    2. Truck
    3. EMS
    4. Brush Company

Objective 3 Identify the mission of the fire service.

1. Fire service mission — To save lives and protect property
    1. Saving people whose lives are threatened
    2. Protecting the lives of firefighters involved in the incident
    3. Programs to prevent fires can help accomplish the mission
        1. Fire prevention and code enforcement
        2. Public education

2. Tactical
    1. Life Safety (protecting the lives of our firefighters and public) (Pets and Livestock)
    2. Incident Stabilization
    3. Property Conservation

Objective 4 Identify the primary functions of Standard Operating Procedures/Guidelines.

1. Policy
2. Procedure
3. Orders/Directives
4. S.O.P.'s

STANDARD 2

Students will understand fire behavior.

Objective 1 Define key terminology related to Fire.

1. Fire/Combustion
2. Heat
3. Ignition Temperature
4. Flammable Limits/Flammable Range
5. Vapor Density
6. Solubility (Miscibility)
7. Flash Point
8. BLEVE (Boiling Liquid Expanding Vapor Explosion)
9. Oxygen (Oxidizing Agent)
10. Oxidizer
11. Oxidation
12. Thermal Layering
13. Pyrolysis
14. Plume
15. Endothermic Reaction
16. Exothermic Reaction
17. Fire Triangle
18. Fire Tetrahedron
19. British Thermal Unit (BTU)
20. Fahrenheit (°F)
21. Celsius (°C)
22. Flameover (Rollover)
23. Flame Point (Fire Point)
24. Flashover
25. Lower Flammable Limit (LFL)
26. Smoke
27. Upper Flammable Limit (UFL)

28. Specific Gravity
29. Surface-to-Mass Ratio

Objective 2 Identify the components of the Fire Triangle and the Fire Tetrahedron.

1. Fire Triangle
    1. Heat
    2. Fuel
    3. Oxygen
2. Fire Tetrahedron
    1. Heat
    2. Reducing Agent (Fuel)
    3. Oxidizing Agent (Oxygen)
    4. Chemical Chain Reaction

Objective 3 Identify the relationship of the concentration of oxygen to combustibility and life safety.

1. Recognize that both fire and humans need oxygen for survival
2. As oxygen levels decrease, the survival of both humans and fire diminish

Objective 4 Identify the products of combustion commonly found in structure fires that create or indicate a hazard.

Essential topics:

1. Carbon Monoxide
2. Hydrogen Chloride
3. Hydrogen Cyanide
4. Carbon Dioxide
5. Phosgene
6. Ammonia
7. Chlorine

Objective 5 Identify the potential consequences of exposure to products of combustion.

1. Heat
2. Smoke
3. Elevated temperatures
4. Decreased oxygen levels
5. Fire gases
    1. Carbon monoxide (CO) - Toxin - impacts at cellular level binds with hemoglobin and inhibits body's use of oxygen. Accumulative effect. Requires medical intervention and time to recover.
    2. Hydrogen Cyanide (HCN) - Toxin - impacts at cellular level. Accumulative effect. Requires medical intervention and time to recover.
    3. Carbon dioxide (CO2) - Asphyxiate - displaces oxygen available to the body. Requires quality air to recover.

Objective 6 Identify the methods of heat transfer.

1. Conduction
2. Convection
3. Radiation

Objective 7 Identify the physical state of matter in which fuels are commonly found.

1. Solid
2. Liquid
3. Gas

Objective 8 Identify common fire conditions.

1. Fire development in a compartment
    1. Incipient stage
        1. Piloted ignition
        2. Non-piloted ignition
        3. Mushrooming
    2. Growth stage
        1. Thermal layering
        2. Isolated flames (ghosting)
        3. Rollover/flameover
        4. Flashover
    3. Fully developed stage
    4. Decay stage (hot smoldering)
        1. Ventilation controlled
        2. Back draft

Objective 9 Identify the process of thermal layering as it relates to a structure fire.

1. Thermal Layering - a tendency of gases to form into layers according to temperatures. (Also known as heat stratification and thermal balance.)
2. The hottest gases tend to be on the top layer, while cooler gases form the lower layer.
3. This takes place only within a compartment (structure fire).

Objective 10 Identify how to avoid disturbing thermal layering.

1. Key terms

1. Thermal balance, heat stratification
2. Neutral plane
3. Inversion

2. Key concepts
    1. Direct fire attack method
    2. Solid fire stream, straight stream, narrow fog stream
    3. Coordinated fire attack and ventilation effort

Objective 11 Identify the development and prevention of a backdraft.

1. Development of backdraft
    1. Low oxygen level
    2. High heat
    3. High fuel concentration
    4. Smoldering fire
2. Prevention of backdraft
    1. Recognize warning signs
        1. Little or no visible flame
        2. Grayish-yellow smoke
        3. Pressurized smoke
        4. Smoke-stained windows
        5. Inwardly drawn smoke
        6. Puffing smoke
    2. Vertical ventilation

STANDARD 3

Students will understand building construction.

Objective 1 Identify common structural components of buildings.

1. Arch
2. Beam
3. Girder
4. Lintel
5. Column
6. Truss
7. Joist
8. Rafter
9. Ridge beam or ridgepole

Objective 2 Identify basic structural characteristics of the following types of building construction.

1. Fire Resistive (Type I)
2. Non-Combustible (Type II)

3. Ordinary (Type III)
4. Heavy Timber (Type IV)
5. Wood Frame (Type V)

Objective 3 Identify the methods of framing used in Type V construction.

1. Post and Beam Construction
2. Balloon Frame Construction
3. Platform Frame Construction
4. Lightweight Wood Frame Construction

Objective 4 Identify the components of a truss.

1. Top Chord
2. Bottom Chord
3. Web Members
4. Gusset Plates

Objective 5 Identify hazards associated with truss and lightweight construction.

1. Roof Collapse
1. Bowstring
    2. Lightweight Truss Systems
2. Floor Collapse
    1. Lightweight Truss Systems
3. Time
    1. Limited time for fire operations.

Objective 6 Identify dangerous conditions created by fire and fire suppression activities.

1. Conditions that contribute to the spread and intensity of the fire.
    1. Fuel Load
    2. Open Stairwells
    3. Open Floor Plans
    4. Wind Driven Fires
2. Conditions that make the building susceptible to collapse.
    1. Lightweight construction - wood and steel
    2. Age of building
    3. Weather
    4. Water weight - added by fire suppression operations

Objective 7 Identify indicators of building collapse.

1. Sagging Roofs or Floors
2. Leaning Exterior Walls
3. Fire Burning in Void Spaces
4. Truss Exposed to Fire

5. Steel Bar Joists Exposed to Fire
6. Plumbing Vent Pipes That Begin to Extend Up
7. Walls Out of Plumb
8. Multiple Floor Fire
9. Chimney Where the Adjoining Wall or Roof has Burned Away

Objective 8 Identify the effects of the fire on the building materials.

1. Wood - loses mass as the material burns, and the loss of mass weakens the wood member until it fails.
2. Masonry - subject to spalling (fragments of concrete dislodged under heat conditions caused by fire).
3. Cast Iron - may fracture or spall when exposed to high temperatures or when heated and cooled by fire streams.
4. Steel - when heated, the steel loses strength and expands (lengthens).

Objective 9 Identify the different types of wall construction.

1. Load-bearing Wall
2. Non-loadbearing Wall
3. Curtain Wall
4. Parapet Wall

Objective 10 Identify the types of loads as they apply to building construction.

1. Axial Load - pass through the center of a particular section or supporting member at a right angle to the cross section of the supporting member.
2. Torsional Load - are parallel to the cross section of the supporting member, typically a column that does not pass through the long axis of the structural member.
3. Eccentric Load - are imposed on a structural member at some point other than the center section of the supporting member.

Objective 11 Identify the types of loads that can be imposed on a structure.

1. Dead Load
2. Live Load
3. Impact Load
4. Fire Load

Objective 12 Identify the different types of floor construction.

1. Concrete Slab Floor
2. Terrazzo Floor
3. Dimensional Lumber Wood Joist Floor
4. Truss Floor
    1. Wood
    2. Steel

STANDARD 4

Students will understand safety.

Objective 1 Identify the importance of physical fitness and a healthy lifestyle to perform the duties of a firefighter.

1. Physical Fitness:
    1. More Productive
    2. Reduce Strains and Sprains (50% FF Injuries)
    3. Reduce Stress
    4. Reduce Heart Attack and Stroke
2. Healthy Lifestyle:
    1. Proper Nutrition
    2. Proper Exercise

Objective 2 Identify the responsibilities of a fire department as required by NFPA 1500, Standard on Fire Department Occupational Safety and Health Program.

1. Recognize Health and Safety as Official Objectives
2. Provide Safe and Healthy Work Environment
3. Promote Safety Throughout the Fire Service
4. Create Safety and Health Policies and Procedures
    1. Develop an Organizational Plan
    2. Develop a Risk Management Plan
    3. Develop a Safety and Health Policy
    4. Define Roles and Responsibilities of Members
    5. Establish a Safety and Health Committee
    6. Keep Records of all Job-Related Accidents, Illnesses, Exposures, and Fatalities
    7. Appoint a Department Health and Safety Officer
    8. Develop Safety and Health related SOPs

Objective 3 Identify the function of the personal protective equipment.

1. Helmet - Protects the head from impact as well as from scalding water and other products of combustion.
2. Protective Hood - Protects portions of the firefighter's face, ears, and neck not covered by the helmet of coat collar from heat.
3. Protective Coat and Trousers (garments) - Protect trunk and limbs against cuts, abrasions, and burn injuries; protects from heat and cold, and provides limited protection from corrosive liquids.
4. Gloves - Protect the hands from cuts, abrasions, and burn injuries.
5. Safety Shoes or Boots (footwear) - Protect the feet from burn injuries and puncture wounds.

6. Eye Protection - Protects the wearer's eyes from hazards encountered during structural fire operations, such as flying particles or liquids.
7. Hearing Protection - Limits noise-induced hearing loss when firefighters engaged in structural firefighting are exposed to extremely loud environments, such as the use of power saws, pneumatic chisels, and gas-powered fans.
8. Self-Contained Breathing Apparatus (SCBA) (Respiratory Protection) - Protects the face and lungs from heat, smoke, and other toxic products of combustion, and airborne contaminants; also provides some eye protection.
9. Personal Alert Safety System (PASS) - Provides and audible means by which a lost, trapped, or incapacitated firefighter can be located.

Objective 4 Identify the care, maintenance, and limitations of personal protective clothing.

1. Protective Clothing must be maintained per Manufacturer's Specifications
2. If Protective Clothing becomes contaminated, it Should Not be worn until properly laundered per the manufacturer's recommended maintenance procedure
3. Inspect and Clean PPE Regularly
4. Repair/Replace any Damage PPE
5. Clean outer shells and liners regularly to remove contamination, grime, and perspiration
6. Required to clean and dry PPE at least every six months in accordance with the manufacturer's recommendations
7. SCBA should be checked before and after each use, daily if possible, or weekly
8. SCBA Cylinder should filled to at least 90% of capacity
9. SCBA gauges, alarms, valves should be in good condition and working properly
10. SCBA harness and hose assemblies should be in good working condition
11. SCBA PASS device should be working properly
12. Clean SCBA and Sanitize Mask after each use

Objective 5 Identify procedures for safely operating at emergency scenes.

1. Requires an Incident Management System
    1. Most Departments Use NIMS-ICS
    2. Must Include Risk Management Plan
    3. Must Include Personnel Accountability System
2. Limit Emergency Operations to those that can be safely conducted by available personnel
3. Requires Rapid Intervention (RIT) for Firefighters in distress
4. Requires Rehab for Firefighters During Emergencies
5. Requires Limiting Firefighter Activities and Exposure to Violence During Civil Disturbances
6. Requires Post-Incident Analysis

Objective 6 Identify the hazards related to electric, gas and water emergencies and actions that can be taken to mitigate electric, gas, and water emergencies.

1. Electric

1. Potential Electrical Shock Hazard
2. De-Energize source can help extinguish fire
3. Toxic fumes from burning electrical components
4. Alternate/Secondary Power supplies/feeds

2. Gas

    1. Potential Explosion
    2. Ignition Source
    3. Vapor Density (Natural Gas/LPG)
    4. Contribute to fire intensity

3. Water
    1. Excess Water Damage
    2. Flooding Lower Areas
    3. Reaction with Electrical

Objective 7 Identify methods for shutting off utility services to a building.

1. Electrical
    1. Contact Service Provider
    2. Utilize Maintenance Personnel
    3. Shut Off Main Disconnect
    4. Shut Off Main Circuit Breakers
    5. Tag Out/Lock Out or Station a FF at Breaker Box
    6. Pull Meter (Caution)

2. Gas
    1. Contact Service Provider
    2. Utilize Maintenance Personnel
    3. Shut Off Main Control Valve (Usually Quarter Turn)
    4. Shut Off Main Control Valve on Tank (LPG Tanks)

3. Water
    1. Contact Service Provider
    2. Utilize Maintenance Personnel
    3. Shut Off Main Supply Line (Entry Point)
    4. Shut Off Underground Valve (Curb Box - Special Wrench)

Objective 8 Identify safety equipment for riding on fire apparatus and its use.

1. Full Protective Clothing - Donned
2. Restraint Devices - Seatbelts for All Personnel
3. Hearing Protection - Noise Levels Exceed 90 dB
4. Non-Enclosed Cabs Also Require:
    1. Safety Bars or Gates
    2. Helmet
    3. Goggles

Objective 9 Identify the components of a firefighter rehabilitation system.

1. Rest – During Crew Rotation
    1. Sit Down
    2. Check Vital Signs
    3. Mentally Disengage from Event
2. Active Cooling
3. Hydration
4. Medical Monitoring
5. Nourishment

Objective 10 Identify the proper use of personal accountability system at an emergency incident.

1. Written Guidelines for Tracking and Inventory of All Members at Incident
2. All Members Must Actively Participate
3. IC is Responsible for Overall Accountability and Maintain an Accountability Worksheet Throughout the Incident
4. IC must Maintain an Awareness of the Location and Function of all Assigned Companies
5. Branch/Division/Group Supervisors must Supervise and Account for All Companies under their Command
6. Company Officers are Responsible for All Company Members
7. Accountability appropriate to size and complexity of incident must be maintained through Span-of-Control Requirements
8. Access to Scene Must be Controlled
9. Department Must Adopt a Personnel Accountability System and Use it on every Emergency Incident
10. Procedures Must be Adopted for Evacuating Personnel from an area where Imminent Hazards are Found
11. Must Appoint an Incident Safety Officer

Objective 11 Demonstrate the donning of the following articles of PPE as part of an ensemble in less than 60 seconds.

1. Helmet (With face shield)
2. Hood
3. Boots
4. Gloves
5. Protective Coat
6. Protective Trousers

Objective 12 Don the following articles of PPE.

1. PASS Device (If not integrated in SCBA)
2. Eye Protection
3. Hearing Protection

Objective 13 Demonstrate the proper doffing of the PPE ensemble and preparing it for reuse.

1. Remove PPE Protective Clothing
2. Inspect PPE for damage and need for cleaning
3. Clean Equipment as needed and remove damaged Equipment from service and report to Officer, if applicable
4. Place Clothing in a Ready state

Standard 4 Performance Evaluation included below (Optional)

STANDARD 5

Students will understand communication.

Objective 1 Distinguish between mutual aid and automatic aid.

1. Mutual Aid – Reciprocal assistance from one fire and emergency services agency to another during an emergency based upon a prearrangement between agencies involved and generally made upon the request of the receiving agency.
2. Automatic Aid – Written agreement between two or more agencies to automatically dispatch predetermined resources to any fire or other emergency reported in the geographic area covered by the agreement. These areas are generally where the boundaries between jurisdictions meet or where jurisdictional “Islands” exist.

Objective 2 Identify fire department radio procedures.

1. Routine Traffic:
    1. Use Clear Text
    2. No Open-Ended Communications
    3. Must Always Have a Response to any Communication
    4. Reply/Repeat any Order Communication
    5. Clear, Calm, Moderate Voice
    6. Avoid Excited Voice or Shouting
    7. Concise and to the Point Communications
2. Emergency Traffic:
    1. MAYDAY Emergency Communications
    2. Stop All Communications
    3. Clear Air Waves
    4. LUNAR Report for MAYDAY
    5. Location, Unit number, Needs/problem, Air level, Resources needed
3. Establish Evacuation Signals:
    1. Announcement Over Radio
    2. Audible Signals (3 Long Blasts on Air Horn)

Objective 3 Demonstrate the following prescribed fire department radio procedures: Routine traffic.

1. Select Proper Frequency
2. Monitor Radio Traffic until Clear
3. Hold Microphone 1 to 2 inches from Mouth at 45-degree angle
4. Depress and Hold Transmit Button until Through with Transmission
5. Announce Routine Radio Traffic
6. Release Transmit Button
7. Follow Department Routine Traffic SOPs

Objective 4 Demonstrate the following prescribed fire department radio procedures: Emergency traffic.

1. Select Proper Frequency
2. Hold Microphone 1 to 2 inches from Mouth at 45-degree angle
3. Depress and Hold Transmit Button until Through with Transmission
4. Announce “Emergency Traffic” for Break In Message Interrupting Air Traffic as Necessary
5. Transmit Emergency Traffic Message following Department SOPs
6. Release Transmit Button
7. Repeat Emergency Message Until Command Verifies Information Given

Objective 5 Demonstrate the following prescribed fire department radio procedures:

Emergency mayday.

1. Select Proper Frequency
2. Hold Microphone 1 to 2 inches from Mouth at 45-degree angle
3. Depress and Hold Transmit Button until Through with Transmission
4. Announce “MAYDAY” for Break in Message Interrupting Air Traffic as Necessary
5. i.e... MAYDAY, MAYDAY, MAYDAY
6. Transmit Emergency Traffic Message following Department SOPs
7. Release Transmit Button
8. Repeat Emergency Message Until Command Verifies Information Given
9. After Transmitting MAYDAY Activate PASS Device and follow Dept SOPs for Positioning or Actions

Objective 6 Demonstrate the following prescribed fire department radio procedures: Emergency evacuation signal.

1. Select Proper Frequency
2. Hold Microphone 1 to 2 inches from Mouth at 45-degree angle
3. Depress and Hold Transmit Button until Through with Transmission
4. Announce “Emergency Traffic” for Break In Message Interrupting Air Traffic as Necessary

    1. i.e. Emergency Traffic, Emergency Traffic, Emergency Traffic

5. Transmit Emergency Traffic Message following Department SOPs

1. Announce “Evacuation Order/Message”
2. May Repeat “Evacuation Order/Message” Several Times to Make Sure Everyone Hears the “Evacuation Order/Message”

6. Release Transmit Button
7. Radio Orders may also include Audible Signals such as Air Horns or Sirens
8. Command Should Request a Personnel Accountability Report (PAR) When an Evacuation Signal is Ordered, to Account for ALL Companies/Personnel

Standard 5 Performance Evaluation included below (Optional)

STANDARD 6

Students will understand self-contained breathing apparatus.

Objective 1 Identify the hazardous environments requiring the use of respiratory protection.

1. Respiratory hazards
    1. Toxic atmospheres described as immediately dangerous to life or health are known as IDLH atmospheres.
    2. OSHA considers the interior of a burning building to be an IDLH atmosphere.
2. Four common respiratory hazards associated with fires and other emergencies:
    1. Oxygen deficiency
    2. Elevated temperatures
    3. Smoke
    4. Toxic atmosphere (with and without fire)

Objective 2 Identify the physical requirements of the SCBA user.

1. Physical Factors:
    1. Physical Condition
    2. Agility
    3. Facial Features
2. Medical Factors:
    1. Neurological Functioning
    2. Muscular/Skeletal Condition
    3. Cardiovascular Conditioning
    4. Respiratory Functioning
3. Mental Factors:
    1. Adequate Training in the Equipment used
    2. Self-confidence
    3. Emotional Stability

Objective 3 Identify the uses and limitations of SCBA.

1. Limitations of Equipment:

1. Limited visibility
2. Decreased ability to communicate
3. Increased weight
4. Decreased mobility

2. Limitations of user (air supply)
    1. Physical condition of user
    2. Degree of physical exertion
    3. Emotional stability of user
    4. Working condition of apparatus
    5. Cylinder pressure before use
    6. Training/experience of user
3. Air management
    1. The air supply left after low-air alarm sounds may not allow enough time to exit.
    2. Firefighters should comply with the accountability system in use, maintain situational awareness, and manage air supply.
    3. The ultimate responsibility for safety rests with the firefighter. Firefighters are responsible for managing their own air supply.

Objective 4 Identify the components, functions, and safety features of SCBA.

1. Open Circuit:
    1. Harness Assembly
    2. Air Cylinder(s)(minutes and pressures)
    3. Regulator (RIC/UAC)
    4. Face piece
    5. PASS (personal alert safety system)
2. Open-Circuit Airline
3. Closed-Circuit

Objective 5 Identify the inspection procedures to be used when wearing and working with SCBA.

1. Cylinder pressure
2. All Gauges
3. Low-pressure Alarm
4. All hose connections
5. Face piece
6. Harness system
7. All valves
8. Any PASS devices

Objective 6 Identify safety procedures to be used when wearing and working with SCBA.

1. Determine need. Is there a problem?
2. Place left hand on face piece
3. Slide hand down mask - check regulator
4. Check air saver or "on" switch
5. Check by-pass or purge valve, is it open or closed?

6. Follow line from regulator to pressure reducer - check for problems. Is there a rip or tear in the line?
7. Check if cylinder valve is in open position
8. Check if cylinder is securely connected to high pressure line
9. Correct any problems found in check as you find them
10. If not able to correct problem, leave area at once with assistance to safe area (call for a "Mayday" and consider buddy breathing, this will be changed for different manufactures)

Objective 7 Identify the emergency procedures to be used in the event of SCBA failure.

1. SOPs for AHJ, and manufacture
2. Do Not Panic
3. Conservation of Air
4. Use Radio (Mayday, location-etc.)
5. Activate PASS Device
6. Change location from IDLH to a safe area

Objective 8 Identify the methods of donning and doffing an SCBA while wearing personal protective equipment.

1. Over the Head method
2. Coat method

Objective 9 Identify the techniques for exiting through a restricted opening.

1. Reduce Profile (loosen straps)
2. Dump Tank/Harness if absolutely necessary
    1. Maintain contact/control with regulator at all times
3. Swim Technique
4. Swim Method for Entanglement

Objective 10 Identify the procedure for changing a low/empty SCBA cylinder.

1. On the firefighter's back
2. Off the firefighter, on the ground

Objective 11 Identify the procedures for cleaning and sanitizing an SCBA.

1. Inspect for damage
2. Harness assembly
3. Air Cylinder
4. Regulator
5. Facepiece
6. PASS devices
7. Reassemble and inspect the entire SCBA before placing back in use.

Objective 12 Identify the components and purpose of an SCBA fill system.

1. Cascade system
2. Filled directly from Compressor, Air Fill Station

Objective 13 Identify the operating principles of an SCBA refilling system.

1. Shielded Fill Station
2. Control Overheating of Cylinders
3. Full Cylinder, not over pressurized

Objective 14 Demonstrate the donning of SCBA while wearing full protective equipment in less than 60 seconds using the over the head method.

1. The specific SCBA manufacturer's recommendations for donning and use of the SCBA should always be followed.
2. General procedure for donning of SCBA:
    1. Position of firefighter
    2. Open cylinder valve fully
    3. Check cylinder and regulator pressure gauges
    4. Grab the harness for proper lift up and over your head
    5. Proper release of harness for proper placement on your back
    6. Fasten all straps; chest, shoulders and then waist
    7. Don facepiece
    8. Test facepiece
    9. Don hood
    10. Connect air
    11. Activate external PASS device
    12. Finish donning PPE

Objective 15 Demonstrate the donning of SCBA while wearing full protective equipment in less than 60 seconds using the regular coat method.

1. The specific SCBA manufacturer's recommendations for donning and use of the SCBA should always be followed.
2. General donning procedures:
    1. Position yourself
    2. Open cylinder
        1. Listen for activation of the integrated PASS Alarm
    3. Check cylinder and regulator pressure gauges
    4. Grasp top of left shoulder strap of the SCBA with the left hand and raise the SCBA overhead
    5. Guide left elbow through the loop formed by the left shoulder strap and swing SCBA around left shoulder
    6. Guide right arm through the loop formed by the right shoulder strap allowing the SCBA to come to rest in proper position

7. Fasten all straps: chest, shoulders and waist
8. Don facepiece: straps, proper seal and operate exhalation valve
9. Don hood; no exposed skin
10. Connect air supply to facepiece
11. Activate external PASS device
12. Finish donning PPE

Objective 16 Demonstrate the donning of SCBA while wearing full protective equipment in less than 60 seconds with face piece – face piece mounted regulator.

1. Fully extend the straps on the facepiece
2. Place your chin in the chin pocket
3. Fit the facepiece to your face, bringing the straps and/or webbing over your head
4. Tighten the lowest two straps; if there are more straps, tighten the top straps last
5. Check for proper seal
6. Put protective hood up so it covers all bare skin. Don your helmet and secure the chin strap
7. Install the regulator on your facepiece

Objective 17 Demonstrate the doffing of SCBA and placing it in the ready position while wearing full protective equipment.

1. Department's SOP and the manufacturer's recommendation
2. Off air
3. Remove SCBA, keeping control of the regulator, (in front of you)
4. Close cylinder valve completely
5. Bleed air from system
6. Check air cylinder pressure, replace if 90% or less rated capacity
7. Return all straps, valves and components back to ready state
8. Inspect SCBA and facepiece for damage
9. Clean equipment as needed and remove damaged equipment from service, and report to company officer
10. Place SCBA back in the proper storage area, for immediate use

Objective 18 Demonstrate and document the cleaning and sanitizing of SCBA components.

1. Prepare cleaning solution, buckets, etc. per manufacturer's guidelines and departmental policies
2. Clean all the SCBA components separately
3. After equipment is clean, inspect for damage, repair the damage and/or replace
4. Place all components in a manner and location so that they can dry
5. Reassemble all SCBA components, placing them in a state of readiness

Objective 19 Demonstrate the inspection procedures for the main components of SCBA.

1. Identify all components of the SCBA are present
2. Insect all components of SCBA for cleanliness and damage

3. Immediately clean dirty components if found. If damaged remove from service and report to an officer
4. Check that cylinder is full (90-100% of capacity)
5. Open the cylinder valve slowly; to verify operation of the low-air alarm and absence of audible air leaks
6. If air leaks are detected; determine corrections needed or if malfunction the SCBA shall be removed for service
7. Check all pressure gauges and/or indicators (i.e. heads-up display) are providing similar pressure readings (check with manufacturers' guidelines)
8. Check the function of all modes of PASS device
9. Don facepiece; to check for seal and operate the exhalation valve
10. Don regulator and check function by taking normal breaths
11. Check bypass and/or purge valve
12. Remove facepiece and prepare all the components of SCBA for immediate reuse

Objective 20 Demonstrate the use of the SCBA in conditions of obscured visibility.

1. Remain low, better your visibility; crawling, and if firefighter can see the floor a crouched or "duck" walk.
2. Check the environment and closely monitor conditions for change, use of thermal imaging technology, also probing with a tool.
3. Never remove the facepiece
4. Maintain an awareness of location
5. Ventilate as you advance if condition will allow
6. Check for outside openings; windows and doors (may provide means of escape)
7. Always maintain direct contact with your team and/or partner at all times, this can be done by use of a tagline between firefighters.
8. Never enter a hostile environment alone

Objective 21 Demonstrate the following emergency procedures to be used in the event of SCBA failure: Use of emergency bypass or purge valve.

1. Location of SCBA by-pass and/or purge valve
2. Don SCBA and facepiece
3. Use as directed by the manufacturer of SCBA
4. Operate by-pass and/or purge valve
    1. Using both hands, one at a time
    2. Using both hands, one at a time with eyes closed

Objective 22 Demonstrate the following emergency procedures to be used in the event of SCBA failure: Conservation of air.

Essential Topics:

1. Don SCBA and facepiece, On Air
2. Follow dept. SOPs for this situation
3. Do not panic

4. Control breathing
    1. In through your nose and out your mouth
    2. Crack your by-pass and/or purge valve for a short time
    3. Alert your partner that you have a problem

Objective 23 Demonstrate the following emergency procedures to be used in the event of SCBA failure: RIC/UAC.

1. RIC/UAC Rapid intervention team/Universal Air Connection
2. Filling unshielded cylinders while a firefighter is wearing the SCBA is prohibited. However, a Rapid intervention crew/team (RIC/RIT) rescuing a trapped or incapacitated firefighter may be granted an exception to this rule.
3. The following three criteria must be met before filling a worn SCBA:
    1. NIOSH-approved RIC Universal Air Connection (UAC) fill option are used
    2. A risk assessment has been conducted to limit safety hazards and ensure that necessary equipment is fully operational
    3. There is an imminent threat to the safety of the downed firefighter, and immediate action is required to prevent loss of life or serious injury

Objective 24 Demonstrate techniques for maximizing the use of the air capacity of a SCBA under work conditions.

1. Know your SCBA
2. Train with your SCBA
3. Know your work time, allowing for entry and exit time
4. Know that the standard rate for consumption for a typical adult under low exertion
5. Perform an Air Consumption test, to help with job/task efficiency
6. Know your personal limits and when to ask for help
7. Knowing your "point of no return"
8. Always remain calm, control your breathing rate (in through your nose and out your mouth), taking shallow breaths

Objective 25 Demonstrate the use of SCBA in exiting through areas with restricted openings in emergency situations: Shifting.

1. Don SCBA and facepiece, On Air
2. Check opening with your hand
3. Change your body position, rotate your body 45 degrees try again
4. Loosen right shoulder strap
5. Loosen waist strap
6. Shift their tank to your left shoulder, this will REDUCE PROFILE
7. On through with right shoulder first

Objective 26 Demonstrate the use of SCBA in exiting through areas with restricted openings in emergency situations: Dumping.

1. Don SCBA and Facepiece, ON Air

2. Check opening with your hand
3. If nothing works to exit restricted opening, then “Dump Tank”
4. Firefighter rolls to your left side
5. Loosens right shoulder strap, loosen and remove waist strap
6. Roll out of the SCBA completely
7. Rotate the SCBA so that the cylinders valve is facing away from the firefighter
8. All straps need to be collected on top of the SCBA neatly, to aid in redonning
9. The firefighter should then move with the SCBA in front but keeping it close to the body to protect it and prevent the facepiece from being pulled off
10. The firefighter should NEVER lose contact with the SCBA
11. Know your surroundings
12. When clear of the obstacle, the firefighter can redon the SCBA by laying out the straps and rolling back into the SCBA

Objective 27 Demonstrate an air cylinder exchange while the SCBA is worn by a firefighter.

1. Don the SCBA and Facepiece, On Air
2. Firefighter On Air will lean forward in a stable position (hands on your knees)
3. Firefighter will disconnect the regulator from the facepiece
4. You will close the cylinder valve, fully
5. Firefighter will release the air pressure from the high and low pressure hose
6. You will disconnect the high-pressure line from the cylinder
7. You will loosen the cylinder strap, remove empty cylinder from harness assembly
8. You will inspect replacement cylinder to ensure the cylinder is 90-100 % of rated capacity
9. You place new cylinder in harness assembly
10. You check the cylinder valve opening and the high-pressure hose fitting for debris
11. You will connect high pressure line to the cylinder
12. You will slowly open cylinder valve fully, listen for audible alarm and leaks
    1. (On some SCBA’s an audible does not sound, know your equipment)
13. Firefighter will don regulator and take normal breaths
14. Firefighter will check the pressure on the remote gauge and/or indicators

Objective 28 Demonstrate an air cylinder exchange while the SCBA is not worn by a firefighter.

1. Place SCBA on a firm surface
2. Close cylinder valve
3. Bleed off air pressure from high- and low-pressure hoses
4. Disconnect high pressure coupling from the cylinder
5. Remove the empty cylinder from harness assembly
6. Verify the replacement cylinder is 90-100% of rated capacity
7. Check cylinder valve opening and high-pressure hose fitting for debris
8. Place the new cylinder into the harness assembly
9. Connect the high-pressure hose to the cylinder
10. Slowly open cylinder valve fully, listen for audible alarm and leaks
    1. (On some SCBA’s an audible does not sound, know your equipment)

11. If air leaks are detected, determine if connections need to be tightened or if valves, donning switch, etc. need to be adjusted. Otherwise SCBA with audible leaks due to malfunction shall be removed from service, tagged, and reported.

Objective 29 Demonstrate the procedures for refilling SCBA cylinders from a Cascade System.

1. Check with manufacturers' procedures for this activity, for your equipment
2. Check the hydrostatic test date of the cylinder that is to be filled
3. Inspect the SCBA cylinder for damage, such as deep nicks, cuts, gouges, or discoloration from heat. Place the SCBA cylinder in a fragment-proof fill station
    1. If damaged or out of hydrostatic test date, remove it from service and tag it for future inspection and hydrostatic testing
    2. NEVER attempt to fill a cylinder that is damaged or that is out of hydrostatic test date
4. Place the SCBA cylinder in a fragment-proof fill station
5. Connect the fill hose to the cylinder and close bleed valve on fill hose
6. Open the SCBA cylinder valve
7. Open the valve at the fill hose, the valve at the cascade system manifold, or the valve at both locations if the system is so equipped
8. Open the valve of the cascade cylinder that has the least pressure but that has more than the SCBA cylinder
9. Close the cascade cylinder valve when the pressure of the SCBA and the cascade cylinder equalize
10. Close the valve or valves at the cascade system manifold and/or fill line if the system is so equipped
11. Close the SCBA cylinder valve
12. Open the hose bleeder valve to bleed off excess pressure between the cylinder valve and the valve on the hose
    1. (FAILURE to open the hose bleeder valve could result in O-ring damage)
13. Disconnect the fill hose from the SCBA cylinder
14. Remove the SCBA cylinder from the fill station
15. Return the SCBA cylinder to proper storage

Objective 30 Demonstrate the procedures for refilling SCBA cylinders from a compressor/purifying system.

1. Check with manufacturers' procedures for this activity, for your equipment
2. Check the hydrostatic test date of the cylinder that is to be filled
3. Inspect the SCBA cylinder for damage, such as deep nicks, cuts, gouges, or discoloration from heat. Place the SCBA cylinder in a fragment-proof fill station
    1. If damaged or out of hydrostatic test date, remove it from service and tag it for future inspection and hydrostatic testing.
    2. NEVER attempt to fill a cylinder that is damaged or that is out of hydrostatic test date.

4. Place the SCBA cylinder in a fragment-proof fill station
5. Connect the fill hose to the cylinder and close bleed valve on fill hose
6. Open the SCBA cylinder valve
7. Turn on the compressor/purifier and open the outlet valve
8. Set the cylinder pressure adjustment on the compressor (if applicable) or manifold to the desired full-cylinder pressure
9. Open the manifold valve (if applicable), and again check the fill pressure
10. Open the fill station valve and begin filling the SCBA cylinder
11. Close the fill station valve when the SCBA cylinder is full
12. Close the SCBA cylinder valve
13. Open the hose bleed valve to bleed off excess pressure between the cylinder valve and the valve on the fill station
    1. (FAILURE to open the hose bleeder valve could result in O-ring damage)
14. Disconnect the fill hose from the SCBA cylinder
15. Remove the SCBA cylinder from the fill station
16. Return the SCBA cylinder to proper storage

Standard 6 Performance Evaluation included below (Optional)

STANDARD 7

Students will be able to identify and use extinguishers.

Objective 1 Identify the system used to classify fire extinguishers including symbols and pictograms.

1. Class Name
    1. Ordinary Combustibles
    2. Flammable and Combustible Liquids and Gasses
    3. Electrical
    4. Combustible Metals
    5. Kitchen
2. Letter Symbol
    1. Green Triangle
    2. Red Square
    3. Blue Circle
    4. Yellow Star
    5. Black Hexagon
3. Image Symbol
1. Trash Can
    2. Flammable Liquid Container
    3. Electrical Outlet
    4. Machining Gear
    5. Frying Pan
4. Description
    1. Wood, paper, plastic

2. Hydrocarbon and alcohol-based liquids and gasses
3. Energized electrical equipment
4. Magnesium, potassium, etc.
5. Cooking oils

Objective 2 Identify the portable extinguisher rating system.

1. Class A
    1. Agent
    2. Duration
    3. Range
    4. Test Fires
    5. 1A-40A
2. Class B
    1. Based on Square Footage
    2. 1B-640B
3. Class C
    1. Comprised of A or B Fires
    2. Rating confirms non-conductivity
    3. Assigned in addition to rating for class A or B
4. Class D
    1. Varies with type of metal being tested
    2. No numerical rating
    3. No multi-purpose rating
5. Class K
    1. Saponification
    2. Capable of extinguishing a minimum surface area of 2.25 square feet
6. Multiple Marking
    1. Suitable for more than one class of fire
    2. Three most common combinations
        1. Class A-B-C
        2. Class A-B
        3. Class B-C
    3. Ratings are independent

Objective 3 Identify the types of fire extinguishers.

1. Pump-Type Water Extinguishers
2. Stored-Pressure Water Extinguishers
3. Wet Chemical Stored-Pressure Extinguishers
4. Aqueous Film Forming Foam (AFFF) Extinguishers
5. Clean Agent Extinguishers
6. Carbon Dioxide Extinguishers
7. Dry Chemical Extinguishers
8. Handheld Units
9. Wheeled Units

Objective 4 Identify the appropriate extinguisher and its application technique for various classes of fire.

1. Selection Factors
1. Classification
    2. Rating
    3. Hazards
    4. Atmospheric conditions
    5. Life hazards
    6. Ease of handling extinguisher
    7. Availability of trained personnel
2. Using Portable Fire Extinguishers
    1. Operational Check
    2. External condition
        1. Hose/nozzle
        2. Weight
        3. Pressure gauge
    3. PASS method of Application

Objective 5 Demonstrate the extinguishment of the following classes of fires using the appropriate portable fire extinguisher: Class A.

1. Size-up fire
2. Pull pin of extinguisher to break inspection band
3. Test to ensure proper operation
4. Carry extinguisher to within stream reach of fire
5. Aim nozzle toward base of fire
6. Discharge extinguishing agent and sweep slowly back and forth across entire width of fire
7. Cover entire area with agent until fire is completely extinguished
8. Back away from the fire area
9. Tag extinguisher for recharge and inspection

Objective 6 Demonstrate the extinguishment of the following classes of fires using the appropriate portable fire extinguisher: Class B.

1. Size-up fire
2. Pull pin of extinguisher to break inspection band
3. Test to ensure proper operation
4. Carry extinguisher to within stream reach of fire
5. Aim nozzle toward base of fire
6. Discharge extinguishing agent and sweep slowly back and forth across entire width of fire avoiding splashing liquid fuels
7. Cover entire area with agent until fire is completely extinguished
8. Back away from the fire area
9. Tag extinguisher for recharge and inspection

Standard 7 Performance Evaluation included below (Optional)

STANDARD 8

Students will identify and use ladders.

Objective 1 Identify the primary materials used in the construction of ladders.

1. Metal Ladders
2. Wood Ladders
3. Fiberglass Ladders

Objective 2 Identify the components of a ladder.

1. Beam
2. Bed Section (base section)
3. Butt (heel or base)
4. Butt Spurs
5. Dogs (see Pawls)
6. Fly Section
7. Foot Pads
8. Guides
9. Halyard
10. Heat-sensor Label
11. Heel (see Butt)
12. Hooks
13. Locks (see Pawls)
14. Main Section (bed or base section)
15. Pawls (dogs or ladder locks)
16. Protection plates
17. Pulley
18. Rails
19. Rungs
20. Shoes (see footpads)
21. Stops
22. Tip (top)
23. Truss block

Objective 3 Identify techniques for safe ladder operations.

1. Develop and maintain adequate upper body strength
2. Wear a full body harness with belay line when training on ladders
3. Operate ladders according to departmental training and procedures
4. Wear protective gear, including gloves and helmet, when working with ladders
5. Choose the proper ladder for the job and load the ladder

6. Use leg muscles, not back or arm muscles, when lifting ladders below the waist
7. Use an adequate number of firefighters for each carry and raise
8. Do not raise any ladders to within 10 feet of electrical wires
9. Check ladder placement for the proper angle
10. Be sure that the hooks of the pawls are seated over the rungs
11. Be sure that the ladder is stable before climbing
12. Be careful when moving ladders sideways
13. Heel the ladder or secure it at the top
14. Climb smoothly and rhythmically
15. Do not overload the ladder
    1. One firefighter every 10 feet
    2. One per section
16. Tie in to ground ladders with a leg lock or ladder belt when working from the ladder
17. Do not relocate a positioned ladder unless ordered to do so
18. Use ladders for their intended purposes only
19. Inspect ladders for damage and wear after each use

Objective 4 Identify the types of ladders.

1. Single Ladders (wall or straight ladders)
2. Roof Ladders (single ladder equipped with folding hooks)
3. Folding Ladders (Attic Ladders)
4. Extension Ladders
5. Pole Ladders (Bangor Ladders)
6. Combination Ladders
7. Pompier Ladders (scaling ladders)

Objective 5 Identify the use of common types of ladders.

1. Single Ladders (wall or straight ladders) - Used for quick access to windows and roofs on one- and two-story buildings
2. Roof Ladders (single ladder equipped with folding hooks) - Used to anchor the ladder over the ridge of a pitched roof so that a firefighter may stand on the ladder for roof work (distributes the firefighter's weight and helps prevent slipping)
3. Folding Ladders (Attic Ladders) - Used for interior attic access
4. Extension Ladders - Used where a specific length adjustment is needed to access windows and roofs
5. Pole Ladders (Bangor Ladders) - Used when desired length exceeds the reach of standard extension ladders (40 feet or longer)
6. Combination Ladders - Used as a self-supporting step ladder (A-frame) and as a single or extension ladder
7. Pompier Ladders (scaling ladders) - Used to climb from floor to floor, via exterior windows, on a multistory building

Objective 6 Identify the selection process for using ladders.

1. Key concepts
    1. The base of the ladder should be placed away from the building approximately one-quarter of the vertical distance from the ground to the point of contact with the wall
    2. Typically, a residential story averages about 10 feet, and the distance from the floor to the windowsill averages about 3 feet
    3. Typically, a commercial story averages about 12 feet, and the distance from the floor to the windowsill averages about 4 feet
    4. When laddering to the roof, extend the ladder (three to five rungs) above the roof edge
    5. Place the tip of a ladder about even with the top of the window and to the windward side to gain access to a narrow window or for ventilation
    6. Place the tip of the ladder just below the windowsill for rescue
    7. For lengths of 35 feet or less, reach is approximately 1 foot less than the designated length
    8. For lengths over 35 feet, reach is approximately 2 feet less than the designated length
2. General selection guidelines
    1. First-story roof - 16 to 20 foot ladder
    2. Second-story window - 20 to 28 foot ladder
    3. Second-story roof - 28 to 35 foot ladder
    4. Third-story window or roof - 40 to 50 foot ladder
    5. Fourth-story roof - over 50 foot ladder

Objective 7 Demonstrate selecting the following ground ladder based upon a given situation: Folding, roof, straight, extension, combination.

1. Selection dependent upon the following:
    1. Estimating height of window
    2. Estimating height of roofline
2. Placement affects size and type selection
    1. Tip must extend 5 rungs above roofline
    2. Ladders for window access must be longer than those for rescue
    3. Tip at ledge for rescue
    4. Tip even with top of window for access
    5. Need for deployment on roof or for interior attic access
    6. Roof ladders provide a means of anchoring ladder on roof ridge
    7. Folding ladders can be carried in narrow passageways and deployed in scuttle holes or small rooms

Objective 8 Demonstrate the one firefighter from an apparatus carry.

1. Ladder is mounted in bracket.
2. Center of ladder is located.
3. Firefighter places an arm between two rungs of the ladder just to one side of middle rung.
4. Beam of ladder is lifted and rested on shoulder.

5. Ladder is carried butt end first.

Objective 9 Demonstrate the one firefighter from the ground carry.

1. Ladder is standing on beam.
2. Center of ladder is located.
3. Firefighter places an arm between two rungs of the ladder just to one side of middle rung.
4. Beam of ladder is lifted and rested on shoulder.
5. Ladder is carried butt end first.

Objective 10 Demonstrate the two-firefighter method – low should carry from the flat racking.

1. Ladder is mounted in Flat Racked compartment.
2. Both firefighters are positioned on same side and face the compartment.
3. Firefighters slide the ladder out of the compartment (usually from the rear of the vehicle).
4. Firefighters will position themselves one near the butt and one near the tip (to position for carrying ladder).
5. Both firefighters place one arm between two rungs of ladder and on command lift the ladder onto their shoulders.
6. Ladder is carried butt first.
7. Firefighter at butt covers spur with gloved hand.

Objective 11 Demonstrate the two-firefighter method – low shoulder carry from vertical racking.

1. Ladder is mounted in bracket.
2. Both firefighters are positioned on same side and face the butt end.
3. Both firefighters place one arm between two rungs of ladder and on command lift the ladder onto their shoulders.
4. Ladder is carried butt first.
5. Firefighter at butt covers spur with gloved hand.

Objective 12 Demonstrate the two-firefighter suitcase carry.

1. Ladder is placed on ground on beam.
2. Both firefighters are positioned on same side and face the butt end.
3. Both reach down and grasp the upper beam of the ladder.
4. On command, both pick up ladder carry it , butt forward, at arm's length.
5. Firefighter at butt covers spur with gloved hand.

Objective 13 Demonstrate the three-fighter method – flat shoulder carry from the ground.

1. Ladder is placed flat on ground.
2. Two firefighters stand on one side of ladder at butt and tip ends.
3. The third firefighter is positioned on opposite side at middle of ladder.
4. All face tip end.

5. All bend down and grasp closest rung at arm's length.
6. On command, all pick up ladder and pivot toward butt when ladder reaches chest height.
7. Ladder beam is placed on shoulders.

Objective 14 Demonstrate the three-firefighter arm's length method – flat carry.

1. Ladder is placed flat on ground.
2. Two firefighters stand on one side of ladder at butt and tip ends.
3. The third firefighter is positioned on opposite side at middle of ladder.
4. All face butt end.
5. All bend down and grasp closest rung at arm's length.
6. On command, all pick up ladder and carry it at arm's length.
7. Firefighter at butt covers spur with gloved hand.

Objective 15 Demonstrate the three-firefighter suitcase carry.

1. Ladder is placed on beam on ground.
2. All firefighters are on same side.
3. A firefighter is positioned at the butt, tip and middle of ladder.
4. All face butt end.
5. All bend down and grasp upper beam of ladder.
6. On command, all pick up ladder and carry it at arm's length.
7. Firefighter at butt covers spur with gloved hand.

Objective 16 Demonstrate the four-firefighter arm's length – flat carry.

1. Bed section of ladder is flat on ground.
2. Firefighters stand at corners on each side of ladder, two at tip and two at butt.
3. All firefighters face butt end.
4. On leader's command, all kneel and grasp the closest rung at arm's length.
5. On command, all pick up ladder and carry butt end forward.
6. Spur is covered by firefighters at tip with gloved hand.

Objective 17 Demonstrate the four-firefighter flat shoulder carry.

1. Bed section of ladder is flat on ground.
2. Firefighters stand at corners on each side of ladder, two at tip and two at butt.
3. All firefighters face tip end.
4. On leader's command, all kneel and grasp the closest rung at arm's length.
5. On command, all stand, raising the ladder.
6. As ladder reaches chest height, all pivot and face butt end.
7. Ladder is placed on shoulders.
8. Spur is covered by firefighters at tip with gloved hand.

Objective 18 Demonstrate the roof ladder carry and raise.

1. Ladder carried to desired work area.
2. Hooks are deployed.
3. Ladder is faced outward against ground ladder.
4. Firefighter climbs ladder until shoulder is midpoint of the roof ladder.
5. Firefighter reaches through rungs.
6. Roof ladder is hoisted onto shoulder.
7. Firefighter climbs to top of ladder.
8. Use appropriate method of securing to ladder.
9. Roof ladder removed from shoulder.
10. Ladder is pushed hand-over-hand on beam onto roof and hooks away from ground ladder.
11. Ladder is pushed up roof with hooks down until edge of peak is cleared.

Objective 19 Demonstrate the one firefighter extension ladder raise.

1. Work area visually inspected.
2. Ladder butt lowered to ground – butt spurs against wall.
3. Firefighter positions to raise ladder.
4. Ladder raised hand-over-hand until parallel against wall.
5. Ladder butt positioned for correct climbing angle.

Objective 20 Demonstrate the two-firefighter extension ladder raise.

1. Butt end is placed on ground by firefighter 1.
2. Firefighter 2 rests ladder beam on shoulder.
3. Ladder is heeled on bottom rung by firefighter 1.
4. Rung or beam is grasped from crouching position by firefighter 1.
5. Firefighter 1 leans back.
6. Firefighter 2 steps beneath the ladder.
7. Firefighter 2 grasps convenient rung with both hands.
8. Firefighter 2 advances hand-over-hand down the rungs to place the ladder in a vertical position.
9. Firefighter 1 grasps successively higher rungs as the ladder nears a vertical position.
10. Firefighter 1 and firefighter 2 face each other.
11. Ladder is heeled.
12. Firefighter 1 grasps the halyard.
13. Firefighter 1 extends the fly section with a hand-over-hand method until ladder tip reaches desire elevation.
14. Firefighter 2 grasps the beams.
15. Both firefighters lower the ladder against building at correcting climbing angle.
16. The halyard is tied off.

Objective 21 Demonstrate the two-firefighter extension ladder raise – TIP position.

1. Butt end is placed on ground by firefighter 1.
2. Firefighter 2 rests ladder beam on shoulder.
3. Ladder is heeled on bottom rung by firefighter 1.

4. Rung or beam is grasped from crouching position by firefighter 1.
5. Firefighter 1 leans back.
6. Firefighter 2 steps beneath the ladder.
7. Firefighter 2 grasps convenient rung with both hands.
8. Firefighter 2 advances hand-over-hand down the rungs to place the ladder in a vertical position.
9. Firefighter 1 grasps successively higher rungs as the ladder nears a vertical position.
10. Firefighter 1 and firefighter 2 face each other.
11. Ladder is heeled.
12. Firefighter 1 grasps the halyard.
13. Firefighter 1 extends the fly section with a hand-over-hand method until ladder tip reaches desire elevation.
14. Firefighter 2 grasps the beams.
15. Both firefighters lower the ladder against building at correcting climbing angle.
16. The halyard is tied off.

Objective 22 Demonstrate the two-firefighter ladder beam raise – HEEL position.

1. Ladder beam is placed on ground at butt end by firefighter 1.
2. Firefighter 2 rests ladder beam on shoulder.
3. Ladder is heeled on butt spur by firefighter 1.
4. Upper beam is grasped by firefighter 1. Back leg is extended for counterbalance.
5. Firefighter 2 advances hand-over-hand down the beam toward the butt end to place the ladder in a vertical position.
6. The ladder is pivoted to position the fly section toward the structure for wooden ladders, away from the structure for metal ladders.
7. The halyard is used to extend the ladder to the desired elevation.
8. Both firefighters lower the ladder against building at correct climbing angle.
9. The halyard is tied off.

Objective 23 Demonstrate the two-firefighter ladder beam raise – TIP position.

1. Ladder beam is placed on ground at butt end by firefighter 1.
2. Firefighter 2 rests ladder beam on shoulder.
3. Ladder is heeled on butt spur by firefighter 1.
4. Upper beam is grasped by firefighter 1. Back leg is extended for counterbalance.
5. Firefighter 2 advances hand-over-hand down the beam toward the butt end to place the ladder in a vertical position.
6. The ladder is pivoted to position the fly section toward the structure for wooden ladders, away from the structure for metal ladders.
7. The halyard is used to extend the ladder to the desired elevation.
8. Both firefighters lower the ladder against building at correct climbing angle.
9. The halyard is tied off. The ladder is pivoted to position the fly section toward the structure for wooden ladders, away from the structure for metal ladders.
10. The halyard is used to extend the ladder to the desired elevation.
11. Both firefighters lower the ladder against building at correct climbing angle.
12. The halyard is tied off.

Objective 24 Demonstrate the three-firefighter extension ladder raise – TIP #1 position.

1. Ladder beam is placed on ground at butt end by firefighter 1.
2. Firefighter 2 rests ladder beam on shoulder.
3. Ladder is heeled on butt spur by firefighter 1.
4. Upper beam is grasped by firefighter 1. Back leg is extended for counterbalance.
5. Firefighter 2 advances hand-over-hand down the beam toward the butt end to place the ladder in a vertical position.
6. The ladder is pivoted to position the fly section toward the structure for wooden ladders, away from the structure for metal ladders.
7. The halyard is used to extend the ladder to the desired elevation.
8. Both firefighters lower the ladder against building at correct climbing angle.
9. The halyard is tied off. The ladder is pivoted to position the fly section toward the structure for wooden ladders, away from the structure for metal ladders.
10. The halyard is used to extend the ladder to the desired elevation.
11. Both firefighters lower the ladder against building at correct climbing angle.
12. The halyard is tied off.

Objective 25 Demonstrate the three-firefighter extension ladder raise – TIP #2 position.

1. Firefighter 1 is located at the ladder butt.
2. Firefighters 2 and 3 are located at the ladder tip.
3. Verify visual check of terrain and overhead obstruction prior to placement and raise.
    1. Ladder beam at is placed on ground at butt end by firefighter 1. Firefighter 2 and 3 rest the ladder flat on their shoulders.
    2. Ladder is heeled at butt end by firefighter 1.
    3. Firefighter 1 grasps convenient rung from crouching position.
    4. Firefighter 1 leans back.
    5. Firefighters 2 and 3 advance in union with outside hands on beam and inside hands on rungs toward the butt end to raise the ladder to a vertical position.
    6. Firefighters 2 and 3 place foot against butt spur.
    7. Ladder is stabilized by firefighters 2 and 3 with both hands-on beam.
    8. Firefighter 1 grasps halyard.
    9. Firefighter 1 places the toe of one foot on butt spur.
    10. Firefighter 1 uses the halyard which is used to extend the ladder to the desired elevation.
    11. All firefighters lower the ladder against building.
    12. The halyard is tied off.

Objective 26 Demonstrate the three-firefighter extension ladder raise – HEEL position.

1. Firefighter 1 is located at the ladder butt.
2. Firefighters 2 and 3 are located at the ladder tip.
3. Verify visual check of terrain and overhead obstruction prior to placement and raise.
    1. Ladder beam at is placed on ground at butt end by firefighter 1. Firefighter 2 and 3 rest the ladder flat on their shoulders.
    2. Ladder is heeled at butt end by firefighter 1.

3. Firefighter 1 grasps convenient rung from crouching position.
4. Firefighter 1 leans back.
5. Firefighters 2 and 3 advance in union with outside hands on beam and inside hands on rungs toward the butt end to raise the ladder to a vertical position.
6. Firefighters 2 and 3 place foot against butt spur.
7. Ladder is stabilized by firefighters 2 and 3 with both hands on beam.
8. Firefighter 1 grasps halyard.
9. Firefighter 1 places the toe of one foot on butt spur.
10. Firefighter 1 uses the halyard which is used to extend the ladder to the desired elevation.
11. All firefighters lower the ladder against building at desired climbing angle.
12. The halyard is tied off.

Objective 27 Demonstrate the four-firefighter extension ladder flat raise – HEEL #1 position.

1. Firefighters 1 and 2 are located at the ladder butt.
2. Firefighters 3 and 4 are located at the ladder tip.
    1. Ladder beam is placed on ground at butt end by firefighters 1 and 2. Firefighters 3 and 4 rest the ladder flat at their shoulders.
    2. Ladder is heeled at butt end by firefighters 1 and 2.
    3. Firefighters 1 and 2 grasp convenient rung from crouching position.
    4. Firefighters 1 and 2 lean back.
    5. Firefighters 3 and 4 advance in union with outside hands on beam and inside hands on rungs toward the butt end to raise the ladder to a vertical position.
    6. All firefighters place foot against butt spur.
    7. Ladder is stabilized by firefighters 2, 3 and 4 with both hands on beam.
    8. Firefighter 1 grasps halyard.
    9. Firefighter 1 places the toe of one foot on butt spur.
    10. Firefighter 1 uses the halyard which is used to extend the ladder to the desired elevation.
    11. All firefighters lower the ladder against building at correct climbing angle.
    12. The halyard is tied off.

Objective 28 Demonstrate the four-firefighter extension ladder flat raise – HEEL #2 position.

1. Verify visual check of terrain and overhead obstruction prior to placement and raise.
2. Firefighters 1 and 2 are located at the ladder butt.
3. Firefighters 3 and 4 are located at the ladder tip.
    1. Ladder beam at is placed on ground at butt end by firefighters 1 and 2. Firefighters 3 and 4 rest the ladder flat at their shoulders.
    2. Ladder is heeled at butt end by firefighters 1 and 2.
    3. Firefighters 1 and 2 grasp convenient rung from crouching position.
    4. Firefighters 1 and 2 lean back.
    5. Firefighters 3 and 4 advance in union with outside hands on beam and inside hands on rungs toward the butt end to raise the ladder to a vertical position.
    6. All firefighters place foot against butt spur.
    7. Ladder is stabilized by firefighters 2, 3 and 4 with both hands-on beam.

8. Firefighter 1 grasps halyard.
9. Firefighter 1 places the toe of one foot on butt spur.
10. Firefighter 1 uses the halyard is used to extend the ladder to the desired elevation.
11. All firefighters lower the ladder against building at correct climbing angle.
12. The halyard is tied off.

Objective 29 Demonstrate climbing the full length of each type of ladder.

1. Straight/Wall Ladder, Extension Ladder, Folding/Attic Ladder
    1. Verify climbing angle
    2. Minimize shifting/bouncing
    3. Eyes forward
    4. Proper Hand Placement
    5. Three points of contact

Objective 30 Demonstrate rising and placement of a ladder for hoseline deployment.

1. Position firefighter(s) on ladder with no more than one firefighter per ladder section
2. Firefighter operating nozzle secures to ladder with leg lock or safety harness
3. Place nozzle through rung of ladder, extending the hose at least one foot in front of firefighter's body
4. Tie off hose with a clove hitch
5. Ensure slack is secured in the hose
6. Ensure nozzle is opened when secured
7. Ensure fire stream is directed at the designated target
8. Ensure nozzle is opened and closed slowly to prevent water hammer

Objective 31 Demonstrate carrying hand tools while ascending and descending a ladder.

1. Wear full protective equipment properly
2. Check ladder for appropriate angle
3. Grasp tool securely in one hand and hold hand and tool against beam of ladder
4. Wrap other hand around beam and begin climb
5. Climb is smooth and safe
6. Maintain contact between free hand and beam by sliding tool along opposite beam

Objective 32 Demonstrate working off a ladder using appropriate safety devices and methods.

Essential Topics:

1. Verify correct climbing angle
2. Climb to desired height
3. Select use of ladder belt OR Leg Lock
    1. Step up one additional rung above desired height
    2. Extend leg between rungs on opposite side where work will take place
    3. Bend knee and bring foot back under rung and through to the climbing side of ladder

4. Secure foot against beam or next lower rung of ladder. Using this for support, step down one rung with opposite foot

Objective 33 Demonstrate raising and placement of a ladder for window ventilation operations.

1. Select correct raise for task at hand
2. Verify climbing angle
3. Ladder placement along side window on windward side
4. Tip of ladder set even with top of window

Objective 34 Demonstrate raising and placement of a ladder for flat roof ventilation operations.

1. Select correct raise for task at hand
2. Verify climbing angle
3. Ladder placement not blocking doors, openings, etc.
4. Tip of ladder set five rungs above roof line

Objective 35 Demonstrating mounting and dismounting a ladder from and into a window.

1. Select correct raise for task at hand
2. Verify climbing angle
3. Ladder placement not at doors, openings, etc.
4. Ensure point of entry is stable
5. Maintain 3 points of contact with ladder
6. When re-mounting utilize appropriate technique
    1. Smoke condition - back out feet first
    2. Better conditions sit on windowsill, legs out, rolling onto ladder

Objective 36 Demonstrate mounting and dismounting a ladder from and onto a roof.

1. Select correct raise for task at hand
2. Verify climbing angle
3. Ladder placement not at doors, openings, etc.
4. Maintain 3 points of contact with ladder
5. Ensure roof is stable before shifting weight from ladder

Objective 37 Demonstrate assisting a conscious victim down a ladder.

1. Correct ladder position
2. Ladder secured for climb
3. Victim lowered from window to rescuer on ladder
4. Victim positioned for carry
5. Rescuer and victim descend ladder

Objective 38 Demonstrate the inspection procedure for ground ladders.

After each use and monthly

1. Heat sensor labels
2. Rungs for damage and wear
3. Rung tightness
4. Bolts and Rivets
5. Welds
6. Beams and Rungs
7. Pawl assemblies
8. Halyard
9. Pulleys
10. Guides
11. Wooden ladders
    1. Finish
    2. Darkening of Varnish
    3. Deterioration
    4. Splintered parts
    5. Water damage
    6. Smooth shoes

Objective 39 Demonstrate the proper procedure for cleaning a ladder.

1. Soft bristle brush
2. Running water
3. Mild Soap
    1. Tar, grease, oil
4. Wiped Dry
5. Inspect for damage during cleaning

Objective 40 Demonstrate maintenance procedures for different types of ground ladders.

1. Kept free from moisture
2. Stored away from vehicle exhaust or engine heat
3. Stored away from exposure to elements
4. Not painted
    1. Exception is the top and bottom 18" for ID purposes

Standard 8 Performance Evaluation included below (Optional)

STANDARD 9

Students will understand hose and appliances.

Objective 1 Identify the construction features of a fire hose.

1. Materials (cotton, nylon, rayon vinyl, poly-mired vinyl, polyester)
2. Methods (braided, wrapped, woven, hard suction)

Objective 2 Identify the construction features of fire hose couplings.

1. Drop Forged
2. Extruded
3. Cast
4. Threaded
5. Storz

Objective 3 Identify the types and sizes of fire hose.

1. Small Diameter Hose
2. Medium Diameter Hose
3. Large Diameter Hose
4. Intake Hose

Objective 4 Identify the types and uses of hose rolls.

1. Straight Roll
2. Donut Roll
3. Twin Donut Roll
4. Self-locking Twin Donut Roll

Objective 5 Identify forward and reverse lays.

1. Forward Lay
2. Reverse Lay

Objective 6 Identify the appliances carried on a pumper as required by NFPA 1901, Standard for Pumper Fire Apparatus.

1. Valve
2. Wye
3. Siamese
4. Water Thief
5. Hydrant Valve
6. Fittings
7. Strainer
8. Master Stream Device
9. Foam Delivery Equipment
10. Tools

Objective 7 Demonstrate major types of hose rolls.

1. Straight Roll
2. Donut Roll
3. Twin Donut Roll
4. Self-Locking Twin Donut Roll

Objective 8 Demonstrate coupling and uncoupling techniques.

1. Single Firefighter Foot Tilt Method
2. Two Firefighter Method
3. Single Firefighter Knee Press Method
4. Two Firefighter Stiff Arm Method

Objective 9 Demonstrate methods to move hoselines into position.

1. Hose Carry/Shoulder Load (Flat or Horseshoe)
2. Hose Carry/Shoulder Load (Flat or Accordion)
4. Hose Drag Method 1
5. Hose Drag Method 2

Objective 10 Demonstrate the loading and deployment of hose loads.

1. Accordion Load
2. Horseshoe Load
3. Reverse Horseshoe Load
4. Flat Load
5. Minuteman Load
6. Dutchman

Objective 11 Demonstrate the function of a hose clamp.

1. Standard Hose Clamp
2. Field Hose Clamp Maneuver

Objective 12 Demonstrate the techniques for lengthening a hoseline using the following equipment.

1. Hose Clamp
2. Break – Apart Nozzle

Objective 13 Demonstrate techniques for replacing a section of hose.

1. Kink Method
2. Clamp Method

Objective 14 Demonstrate the use of key hose appliances.

1. 2½ inch Hydrant Valve
2. Double – Gated Reducing Leader Wye
3. Master Stream Device, 1000GPM Minimum
4. Double Male Adapter
5. Double Female Adapter

Objective 15 Demonstrate advancing a charged 1 ½ inch and 2 ½ inch attack line from a pumper as a member of a hose team.

1. Into a structure at ground level

Objective 16 Demonstrate carrying an attack line into a structure.

1. The duck walk
2. Nozzle positioning
3. Backup position
4. Door position duties during the advance

Objective 17 Demonstrate the procedures for cleaning and maintaining fire hose.

1. Visual Inspection hose and couplings
2. Wash dirty hose and dry hose

Objective 18 Demonstrate the procedures for cleaning and maintaining couplings.

1. Visual Inspection:
    1. Look for thread damage
    2. Look for pliable rubber gasket in female couplings
    3. Apply silicone lubricant to the swivel

Objective 19 Demonstrate connecting hoseline(s) from a fire pumper to a fire department connection.

1. Confirm Order with Officer to connect line(s) to FDC.
2. Extend hoseline from pumper discharge to the FDC with male thread toward FDC connection.
3. Lay down hose fitting at FDC, protecting male fittings.
4. Remove caps from FDC.
5. Inspect the FDC for debris, check threads, check gasket and replace if necessary.
6. Connect hoselines to the outlets. (Lowest First)
7. Tighten connections with spanner wrench.
8. Report to Officer the completion of assignment.

Objective 20 Demonstrate connecting a 3 inch or smaller hose to a hydrant.

1. As a Safety Precaution – Tighten Hydrant Caps Not used
2. Turn outlet nut counterclockwise and remove cap from one outlet
3. Connect 3 inch or smaller hose to hydrant outlet

Objective 21 Demonstrate connecting a 4 ½ inch or larger soft sleeve intake hose to a hydrant.

1. Examine hydrant
2. Remove hydrant cap and inspect threads
3. Look in nozzle (wet barrel) or barrel (dry barrel) for debris

4. Flush hydrant
5. Connect supply hose to hydrant
6. Open hydrant fully when told to do so

Objective 22 Demonstrate connecting a 4 ½ inch or larger hard intake hose to a hydrant.

1. Confirm order with officer to make hydrant connection
2. Remove intake hose from pumper
3. Connect the intake hose to the hydrant or apparatus (depending on local preference), turning connection clockwise and making hand tight
4. Connect opposite end to the hydrant or apparatus, turning connection clockwise and making hand tight

Objective 23 Demonstrate advancing a 1 ½ inch and 2 ½ inch attack line from a pumper as a member of a team: to an upper floor by hoisting.

1. Tie a closed clove hitch behind first coupling
2. Tie safety knot
3. Take a bight in the rope and pass it through the bale and over the nozzle

Objective 24 Demonstrate unloading non-preconnected wyed hoseline.

1. Hose load finishes (Reverse horseshoe load)
2. Grasp the inner fold of the load and nozzle in one hand
3. Grasp the wye appliance in the other hand
4. Step down from the tailboard and pull the hose assembly to the ground, positioning yourself in view of the driver's mirror
5. Anchor the hose assembly with one knee
6. Signal the driver to "Go"

Objective 25 Demonstrate unloading a pre-connected hoseline Flat Load.

1. Approach the bay
2. Place the larger dog ear around shoulder
3. Hold the small dog ear in one hand and the nozzle in the other hand
4. Walk away from the engine toward your destination
5. Drop the loop from your hand when it gets taut
6. Drop the loop from your shoulder when it becomes taut
7. Take the nozzle and move to your destination

Objective 26 Demonstrate unloading pre-connected hoseline Minuteman.

1. Grab entire hose bundle placing the bottom off the load and nozzle on shoulder
2. Make your way to your objective as the hose pays out with your forward progress
3. Flake out the rest of your working line
4. Call for water

Objective 27 Demonstrate hand laying 300 feet of supply line (2 ½ inch or 3 inch) from a pumper to a water source utilizing two or three firefighters.

1. FF # 1 - Attach a nozzle to the end of the hose if desired.
    1. FF #1 - Assist other FFs with loading hose on their shoulders.
    2. FF # 2 - Position on the tailboard facing the direction of travel.
3. FF # 2 - Place the initial fold of hose over the shoulder so the nozzle can be held at chest height.
4. FF # 2 - Bring the hose from behind back over the shoulder so that the rear fold ends at the back of the knee.
5. FF # 2 - Make a fold in front that ends at knee height and bring the hose back over the shoulder.
    1. (Repeat Steps 4 & 5 until appropriate amount of hose is loaded on shoulder)
7. FF # 2 - Move forward approximately 15 feet.
8. FF # 3 - Position on the tailboard facing the direction of travel.
9. FF # 3 - Load hose onto the shoulder in the same manner as FF # 2, making knee-high folds, until an appropriate amount of hose is loaded on shoulder.
10. FF # 1 - Uncouple the hose from the hose bed, and hand the coupling to the last firefighter.

Objective 28 Demonstrate inspecting couplings for damage.

1. Visual Inspection-look for:
    1. Damaged threads
    2. Corrosion
    3. Slippage of the hose
    4. Swivel not rotating freely
    5. Missing lugs
    6. Loose external gasket

Standard 9 Performance Evaluation included below (Optional)

STANDARD 10

Students will understand nozzles and streams.

Objective 1 Define fire stream.

1. A stream of water or other extinguishing agent after it leaves a fire hose and nozzle, until it reaches the desired point

Objective 2 Identify the purpose of a fire stream.

1. Cooling
2. Provide Protection

Objective 3 Identify the various uses of water as an extinguishing agent.

1. Cooling
2. Latent Heat of Vaporization
3. Smothering

Objective 4 Identify the types of fire stream nozzles.

1. Smooth Bore Nozzle
2. Fog Nozzle
3. Combination Nozzle

Objective 5 Identify the water flow/GPM of handlines and master streams.

1. Fire stream classification
    1. Low-volume stream - Less than 40 gpm
    2. Handline stream - 40 to 350 gpm
        1. 1 1/2" handline = 60-150 gpm
        2. 1 3/4" handline = 95-200 gpm
        3. 2 1/2" handline = 200-325 gpm
    3. Master stream - Greater than 350 gpm
        1. 3" supply line = 0-500 gpm
        2. 4" supply line = 0-1,200 gpm
        3. 5" supply line = 0-2,000 gpm

Objective 6 Define nozzle reaction.

1. Nozzle Reaction: As water is discharged and flowing from the nozzle, an equal and opposite reaction is realized by the nozzle operator.

Objective 7 Identify methods of water application.

1. Direct method of attack
2. Indirect method of attack
3. Combination method of attack

Objective 8 Identify the principles of both Class A and Class B foam as an extinguishing agent.

1. Class A Foam
2. Class B Foam (Synthetic & Protein)

Objective 9 Identify the methods by which foam prevents or controls a hazard.

1. Separating - Creates a barrier between the fuel and the fire

2. Cooling - Lowers the temperature of the fuel and adjacent surfaces
3. Smothering - Suppresses the release of flammable vapors reducing the possibility of ignition or reignition
4. Penetrating - Lowers the surface tension of water and allows it to penetrate deep-seated fires

Objective 10 Identify the principle by which foam is generated.

1. Key terms
    1. Foam concentrate-Raw foam liquid before the introduction of water and air
    2. Foam proportioned (educator)-Device that introduces foam concentrate into the water stream to make a foam solution
    3. Foam solution-Mixture of foam concentrate and water before the introduction of air
    4. Foam (finished foam)-Completed product after air is introduced into the foam solution
2. Key concepts
    1. Proportioning and aeration
    2. Foam expansion
    3. Foam concentrates
        1. Class A
        2. Class B
        3. Special application foams
    4. Foam Proportioning methods
        1. Induction
        2. Injection
        3. Patch-mixing
        4. Premixing
    5. Foam proportions
        1. Portable foam proportions
        2. Apparatus-mounted proportions
        3. Compressed-Air Foam Systems (CAFS)
    6. Foam delivery devices
        1. Handline nozzles
        2. Medium- and high-expansion foam generating devices
    7. Causes for poor-quality foam, or failure to generate foam

Objective 11 Demonstrate the following methods of water application.

1. Direct
2. Indirect
3. Combination

Objective 12 Demonstrate the procedure of bleeding/purging air from a handline.

1. Prior to entering the fire area, the nozzle must be opened fully to let the air out and tomake sure the line is supplied with sufficient water flow and pressure before commencing the attack.

Objective 13 Demonstrate the use of nozzles carried on a fire pumper.

1. Smooth Bore Nozzle
2. Combination Nozzle

Objective 14 Demonstrate the procedure of opening and closing a nozzle.

1. Open nozzle away from everyone
2. Open nozzle by pulling bale toward you
3. Open nozzle all the way
4. Keep nozzle open until all the air is out of hose
5. Close nozzle by pushing bale away from you
6. Open and close nozzle slowly so you don't create a water hammer effect

Objective 15 Demonstrate the procedure of adjusting the stream pattern on a fog nozzle.

1. Open nozzle away from everyone
2. Open nozzle by pulling bale toward you
3. Open nozzle all the way
4. Keep nozzle open until all the air is out of hose
5. Close nozzle by pushing bale away from you
6. Open and close nozzle slowly so you don't create a water hammer effect

Objective 16 Demonstrate the procedure of opening and closing a solid stream nozzle.

1. The nozzle bale should be a slightly bent arm's reach out in front of the nozzle operator
2. The line should be on the side of the nozzle operators dominant arm
3. The forward, or left, hand controls flow and directs the stream
4. The forward hand controls the bale
5. Once the bale has been operated, the hand moves to the hose behind the last male hose butt
6. The hand must be in an underhand position on the hose
7. Overcome reaction force when opening the nozzle
8. Open and close the bale slowly as to not cause a water hammer

Objective 17 Demonstrate the procedure of inspecting a nozzle.

1. Clean nozzles after each use
2. Inspect nozzles after each use:
    1. Check that the waterway is clear of obstructions
    2. Make sure the bale works properly
    3. Check to make sure there are no dents or nicks in the tip of the nozzle

4. Make sure there are no missing parts
5. Worn out gaskets must be replaced

Standard 10 Performance Evaluation included below (Optional)

STANDARD 11

Students will understand water supply.

Objective 1 Identify the water sources and the components of a water distribution system in the local community.

1. Ground Water:
    1. Aquifers
    2. Underground Rivers
    3. Springs
2. Surface Water:
    1. Rivers
    2. Lakes
    3. Ponds
3. Components of Water Distribution System:
    1. Means of Moving Water:
        1. Direct Pumping
        2. Gravity Systems
        3. Combination Systems

2. Water Treatment Facilities:

1. Remove Contaminants
    2. Filter Particulates
    3. Add Chlorine (Purification) (Haz-Mat)
    4. Add Fluoride (Prevent Tooth Decay)
4. Elevated Water Storage Tanks:
5. Distribution Systems: (Mains)
    1. Primary Feeders
    2. Secondary Feeders
    3. Distributors
    4. Water Main Valves:
    5. Indicating Valves:
        1. OS&Y - Outside Stem & Yoke
        2. PIV - Post Indicator Valve (Open /Shut)
        3. Butterfly Valve
    6. Non-Indicating Valves:
        1. Gate Valve (Number of Turns)
        2. Butterfly Valve

Objective 2 Identify the characteristics and operation of fire hydrants.

1. Fire Hydrant Characteristics:
    1. Outside Parts Cast Iron
    2. Internal Working Parts Bronze
    3. Valve Facings Rubber, Leather, Composite Materials
    4. Must Open/Close Slowly to Prevent Damage
    5. Dry Barrel Hydrant:
        1. Prolonged Periods of Subfreezing Weather
        2. Main Valve located below Frost Line
        3. Hydrant Barrel Empty between Top and Main Valve
        4. Stem Nut Turned Counterclockwise to Open Main Valve
        5. Drain Holes are located near the bottom of the Hydrant
        6. Must be Fully Opened or Fully Closed to Prevent “Undermining” the Hydrant Base through the Drain Holes
    6. Wet Barrel Hydrant:
        1. Known as Frost-Free Hydrants
        2. Usually Installed in Warmer Climates
        3. Horizontal Compression-Type Valves on Each Outlet
        4. The Barrel is Always filled with Water

2. Fire Hydrant Operation:

1. Dry Barrel Hydrant:
    1. Remove Caps from Ports being Used
    2. Inspect Hydrant and Port for Debris and Damage
    3. Turn Stem Nut Counter-Clockwise to begin Flow of Hydrant to Insure Flow of Water, and to Flush Hydrant
    4. Turn Stem Nut Clockwise to Stop Water Flow of Hydrant
    5. Attach Supply Hose(s) to Hydrant Port(s)
    6. Wait for Signal to Charge Hydrant
    7. Fully Open Hydrant by Turning Stem Nut until Stem Nut will No Longer Turn
    8. To Shut Down Hydrant Turn Stem Nut Clockwise Slowly until Valve Closes and the Stem Nut No Longer Turns
    9. Relieve any Pressure
    10. Remove Supply Hoses from the Port(s)
    11. Replace Caps on All Ports Except One
    12. Insure Water Drains from the Barrel by verifying a Vacuum is Created at the Port
    13. Replace the Remaining Cap
2. Wet Barrel Hydrant:
    1. Remove Caps from Ports being Used
    2. Inspect Hydrant and Port for Debris and Damage
    3. Turn Stem Nut Opposite Side of Port Counter-Clockwise to begin Flow of Hydrant to Insure Flow of Water, and to Flush Hydrant
    4. Turn Stem Nut Opposite Side of Port Clockwise to Stop Water Flow of Hydrant
    5. Attach Supply Hose(s) to Hydrant Port(s)
    6. Wait for Signal to Charge Hydrant
    7. Fully Open Hydrant by Turning Stem Nut Opposite Side of Port until Stem Nut will No Longer Turn

8. To Shut Down Hydrant Turn Stem Nut Clockwise Slowly until Valve Closes and the Stem Nut will No Longer Turn
9. Relieve any Pressure
10. Remove Supply Hoses from the Port(s)
11. Replace All Caps on All Ports

Objective 3 Identify causes of increased resistance of friction loss in water distribution systems and hydrants.

1. Pipe Diameter
2. Pipe Materials
3. Mineral Encrustation
4. Sediment
5. Partially Closed Valves
6. Dead-End Hydrants

Objective 4 Identify conditions which may reduce hydrant effectiveness.

1. Main Pipe Diameter
2. Distribution System Pressure
3. Dead-End Hydrants
4. Partially Open Valves
5. Discharge Openings:
    1. 2-1/2 Ports
    2. Steamer Ports

Objective 5 Demonstrate connecting a small intake hose to a hydrant and fully opening and closing the hydrant.

1. As a safety precaution – tighten hydrant caps not used
2. Turn outlet nut counterclockwise and remove cap from one outlet
3. Connect small intake hose to hydrant outlet
4. Open the hydrant fully
5. Close the hydrant fully
6. Relieve pressure
7. Remove small intake hose from hydrant outlet
8. Replace cap on outlet

Objective 6 Demonstrate the hydrant to pumper hose connections for forward lay.

FF # 1

1. Grab sufficient amount of hose to reach the hydrant.
2. Step down from the tailboard and face the hydrant with all the equipment necessary to make the hydrant connection.
3. Approach the hydrant and loop the hydrant in accordance with SOPs.
4. Signal Driver/Operator to proceed driving to the fire.

5. Remove cap from hydrant.
6. Place the hydrant wrench on the valve stem operating nut.
7. Remove the hose loop from the hydrant.
8. Connect the hose to the outlet nearest the fire.
9. Open the hydrant fully when the appropriate order or signal is given.
10. Return to the apparatus, tighten leaking couplings, and push the hose toward the curb along the way.

FF # 2

1. After completing the hose lay to the scene, apply the hose clamp on the supply line 20 feet behind the apparatus.
2. Give the signal to charge the line.
3. Uncouple the hose from the bed (allowing enough hose to reach the pump inlet).
4. Connect the hose to the pump.
5. Release the hose clamp.

Objective 7 Demonstrate the hydrant to pumper hose connections for a reverse lay.

FF # 1

1. Pull sufficient hose to reach the intake valve on the attack pumper.
2. Anchor the hose.
3. Apply a hose clamp to the hose at the attack pumper.

FF # 2

1. After the pumper stops at the water source, make an intake hose connection.
2. Pull the remaining length of the last section of hose from the hose bed.
3. Disconnect the couplings and return the male to the hose bed.
4. Connect the supply hose to the discharge valve.

Objective 8 Demonstrate the proper procedure for making hydrant connections for a soft sleeve or large diameter hose.

1. Confirm order with officer to make hydrant connection.
2. Remove necessary equipment from the pumper.
3. Remove the hydrant cap by turning it counterclockwise and use a spanner wrench if the cap is tight.
4. Inspect the hydrant for exterior damage and check for debris or damage in inside outlet.
5. Place the hydrant wrench on hydrant nut, with handle pointing away from outlet.
6. If Necessary - Place reducer adapter (Steamer/Storz) on hydrant, turning clockwise and making hand tight.
7. Remove intake hose from the pumper.
8. Connect the intake hose to the pump intake, turning clockwise and making hand tight.

9. Stretch the intake hose to the hydrant, placing two full twists in the hose to prevent kinking.
10. Make the hydrant connection to the steamer outlet or outlet with adapter, turning clockwise and making hand tight.
11. Open the hydrant slowly until hose is full (Fully Open).
12. Tighten any leaking connections using rubber mallet or spanner wrench.

Fire Science Performance Standards (Optional)

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FS1-4.11: Don PPE For Use at an Emergency

Students will Demonstrate the donning of the following articles of PPE as part of an ensemble in less than 60 seconds: PASS device (if not integrated in SCBA), eye protection, hearing protection.

Overview

- Performance assessment in which an individual student demonstrates the ability to properly, safely, and efficiently don their personal protective equipment within the national accepted time allotment (The NFPA® requires that protective clothing be donned in one minute.)
- This is a baseline assessment that focuses on a specific, individual skill.
- The assessment typically would take place during the course.
- Students should be provided with the scorecard (next page) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

Starting Position:

- The student will start the activity wearing the “station uniform” per local course requirements.
- The complete PPE ensemble should be laid out and checked for service ready to don for the start of this activity:
    - Bunker pants
    - Structural firefighting boots
    - Nomex hood (as available), see step #2 in scorecard
    - Turnout coat
    - Gloves (structural or utility/extrication)
    - Helmet
- When the student is ready the assessment administrator shall give the command “GO” and start the stopwatch.
- Throughout the activity, the assessment administrator will be evaluating the student using the performance task scorecard provided.
- At the completion of Step 5 (Don gloves), the assessment administrator will stop the stopwatch, then score Step 6 (time limit)

Equipment & Materials

- Full Protective clothing (excluding SCBA)
- Stopwatch

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
4.11 Demonstrate the donning of PPE as an ensemble in less than 60 seconds	12 points	11 points	8-10 points	< 8 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will confirm that:

- The student is wearing “station uniform” per local course requirements.
- The complete PPE ensemble is laid out and checked for service, ready to don:
    - Bunker pants
    - Structural firefighting boots
    - Nomex hood (as available), see step #2 in scorecard
    - Turnout coat
    - Gloves (structural or utility/extrication)
    - Helmet
- When the student is ready the assessment administrator shall give the command “GO” and start the stopwatch.
- Observe the student’s performance and record the appropriate score and any comments for each step.

- At the completion of Step 5 (don gloves), the assessment administrator will stop the stopwatch, then score Step 6 (time limit)

Table 1. Criteria Scorecard: Donning PPE For Use at An Emergency

Criteria Scorecard: Donning PPE For Use at An Emergency		2 points each	Comments
1	• Don boots and pants including inside and outside closures and suspenders in place (2 points) • If boots and pants are on, but inside and outside closures not fastened and/or suspenders not up (1 point)		
2	• Don hood (may be down around the neck) (2 points) • If no hood is available, student should state aloud that he/she would don hood to receive points.		
3	• Don coat, including inside and outside closures and collar up with closure fastened (2 points) • If coat is on, but inside and outside closures are not fastened and/or collar down or not fastened (1 point)		
4	• Don helmet fastening chin strap and having flaps down. (2 points) • If helmet is on, but chin strap not fastened or flaps up (1 point)		
5	Don gloves (over gauntlets if equipped) (2 points)		
6	Donning shall be completed in 60 seconds or less (2 points)		
ASSESSMENT TOTAL		**12 POINTS POSSIBLE**	

FS1-4.13: Doff PPE and Prepare for Reuse

Students will demonstrate the proper doffing of the PPE ensemble and preparing it for reuse

Overview

- Performance assessment in which an individual student demonstrates the ability to properly doff their PPE, inspect it for damage, identify when the PPE needs to be laundered and what to do if the PPE needs repair. The student shall place their PPE in a ready state so they may don the PPE when needed.
- This is a baseline assessment that focuses on a specific, individual skill.

- The assessment typically would take place during the course.
- Students should be provided with the scorecard (next page) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

Step #3: Student should state factors that would require laundering

In the classroom/assessment setting, visible contamination, grime, perspiration, or soot (factors that require laundering) typically would not be found. Therefore, during this step THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, "THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, "WHAT FACTORS MAY BE PRESENT THAT WOULD REQUIRE LAUNDERING?"

Step #4: The student should state the appropriate method of cleaning

THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, "WHAT IS THE APPROPRIATE METHOD OF CLEANING THE PPE?"

Step #5: The student should state action to take if damage is found.

In the classroom/assessment setting, equipment typically would not be damaged. Therefore, during this step THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, "WHAT SHOULD YOU DO IF DAMAGE TO PPE IS FOUND?"

Step #6: Place clothing in a ready state.

Before starting the assessment, the assessment administrator should inform or remind the student the local instructions for the designated area where the PPE components should be placed

Starting Position:

- The student will start the activity with complete PPE ensemble on:
    - Bunker pants
    - Structural firefighting boots
    - Nomex hood (as available)
    - Turnout coat
    - Gloves (structural or utility/extrication)
    - Helmet
- When the student is ready the assessment administrator shall give the command "GO" and start the assessment.

Equipment & Materials

- Full Protective clothing donned (excluding SCBA)

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
4.13 Demonstrate the proper doffing of the PPE ensemble and preparing it for reuse	12 points	11 points	8-10 points	< 8 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will:

- Confirm that the student is wearing the complete PPE ensemble:

- Bunker pants
- Structural firefighting boots
- Nomex hood (as available)
- Turnout coat
- Gloves (structural or utility/extrication)
- Helmet

- Inform/remind the student the designated area where the PPE components should be placed (Step #6)
- Tell the student, “During the assessment you will need to verbally state answers to questions I ask.”
- When the student is ready the assessment administrator shall give the command “GO” and start the assessment.
- The assessment administrator shall:
  - Observe the student’s performance and record appropriate score and any comments for each step.
  - Ask the student questions during Steps #3, #4, and #5 as indicated on the scorecard.

Table 2. Criteria Scorecard: Doff PPE and Prepare for Reuse

Criteria Scorecard: Doff PPE and Prepare for Reuse		2 points each	Comments
1	Remove protective clothing in the reverse order of donning their PPE: Gloves, Helmet, Hood, Coat, Pants, Boots (2 points)		
2	Inspect all components of PPE for damage and the need for cleaning. • Full points for putting hands on all the components of the PPE, to inspect it forcleanliness and damage. • No points for only doing a visual, without putting hands on all the components of the PPE.		
3	Identify factors and the appropriate times when PPE needs to be laundered (2 points) **THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, “WHAT FACTORS MAY BE PRESENT OR TIME WOULD REQUIRE LAUNDERING?”** Full points for stating any visible contamination, grime, perspiration, or soot, or a minimum of twicea year.		

5	State the procedure that would be followed if damage to PPE is found. **THE ASSESSMENT ADMINISTRATOR ASKS STUDENT, "WHAT SHOULD YOU DO IF DAMAGE TO PPE IS FOUND?** Full points if they state that damaged PPE shall be removed from service, tagged, and reported to the officer (2 points)		
6	Place clothing in a ready state. Full points if pants are pushed around boots with suspenders on top, jacket hung on proper hanger, helmets hung and gloves and hood stored properly(2 points)		
ASSESSMENT TOTAL		**12 POINTS POSSIBLE**	
Criteria Scorecard: Doff PPE and Prepare for Reuse		**2 points each**	**Comments**
4	State the procedure for laundering the PPE. **THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, "WHAT IS THE APPROPRIATE METHODOF CLEANING THE PPE?"** Students should describe the appropriate method of cleaning their PPE including removing the linersfrom the shells and turning the liners inside out (2 points)		

FS1-5.3: Routine Radio Traffic

Students will demonstrate the following prescribed fire department radio procedures: Routine traffic.

Overview

Radio communication is a critical component of fire department operations. This performance evaluation guides the student through the proficiencies required in the task of transmitting a routine radio message that is clear and understandable.

Students should be provided with the scorecard (next page) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.
One of the following types of routine radio messages should be used for the assessment:

- Command from Engine 1. Do you have an assignment for us?
- Dispatch from Engine 1 we are on scene.
- Operations from Engine 1. We have water on the fire.
- Operations from Truck 1. Ventilation has been completed.

Step #1: The assigned frequency will be determined by the course instructor, as appropriate for situation/location where assessment takes place. Students and other assessment administrators (as applicable) should be informed of this frequency at the time of the assessment.
Step #5: The appropriate language for department codes, SOPs, or class procedures to be used for this assessment will be determined by the course instructor. Students and other assessment administrators (as applicable) should be informed in advance by instructor on what message to communicate during drill.

Equipment & Materials

- Portable radios issued to students by instructor

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
5.3 – Routine Radio Traffic	10 points	9 points	7-8 points	< 7 points

Assessment Instructions
At the time of the assessment, the instructor/assessment administrator will:

- Take the radio equipment to the assessment site.
- Let the student know the assigned radio frequency to be used for this assessment.
- Tell the student the message they should communicate in Step #5 (see list on page 1)
- Tell the student to begin. Observe the student's performance for each step. Record appropriate scores and any comments.

Table 3. Criteria Scorecard: Routine Radio Traffic

	Criteria Scorecard: Routine Radio Traffic	**2 points each**	**Comments**
1	Rotate the selector knob to assigned frequency. • Correctly rotates the selector knob on portable radio to the assigned frequency as specified by the assessment administrator (2 points)		
2	Monitor for radio traffic until air is clear. • Monitors radio traffic until clear before transmitting a message (2 points)		

Criteria Scorecard: Routine Radio Traffic		2 points each	Comments
3	Hold the microphone: in transmit position, 1 to 2 inches (25 mm to 50 mm) from your mouth, at a 45-degree angle • Holds the microphone correctly in all three aspects (2 points)		
4	Depress the transmit button, holding down until through with transmission • Depresses the transmit button, holding down until through with transmission (2 points)		
5	Transmit the assigned routine traffic message using appropriate language for department codes, SOPs, or class procedures (per assessment administrator instructions). • Transmits a routine traffic message, correctly using department codes, SOPs, or class procedures (2 points)		
ASSESSMENT TOTAL		**10 POINTS POSSIBLE**	

FS1-5.5: Emergency Radio Traffic (Mayday)

Students will demonstrate the following prescribed fire department radio procedures: Emergency Mayday signal

Overview

Radio communication is a critical component of fire department operations. This performance evaluation guides the student through the proficiencies required in the task of transmitting an emergency Mayday radio message that is clear and understandable.

Students should be provided with the scorecard (next pages) in advance, with corresponding instructionand opportunity for practice using the same equipment they will use for the assessment.

Step #1: The assigned frequency will be determined by the course instructor, as appropriate for situation/location where assessment takes place. Students and other assessment administrators (as applicable) will be informed of this frequency at the time of the assessment.

Steps #4 and #5a: The appropriate language for department codes, SOPs, or class procedures to be used for this assessment will be determined by the course instructor. Students and other assessment administrators (as applicable) will be informed in advance of the message to be used during this assessment.

Step #6: Verification of message will be accomplished by the assessment administrator responding to message stating the message was received.

Equipment & Materials

- Portable radios issued to students by instructor

- PASS alarm attached to self-contained breathing apparatus (SCBA)

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
5.5 Emergency Mayday	18	16-17	13-15	< 13

Assessment Instructions

At the time of the assessment, the instructor/assessment administrator will:

- Confirm that the radio equipment is ready to use at the assessment site.
- Tell he student the assigned radio frequency to be used for this assessment.
- Tell the student the message they should communicate in Steps #4 and #5a.
- Inform the student that you will verify the message in Step 6.
- Tell the student to begin. Observe the student's performance for each step. Record appropriate scores and any comments.

Criteria Scorecard		2 points each	Comments
1	Correctly rotates the selector knob on portable radio to the assigned frequency as specified by the assessment administrator (2 points)		
2	Holds the microphone correctly in all three aspects:in transmit position, 1 to 2 inches (25 mm to 50 mm) from your mouth, at a 45-degree angle		

3	Depress the transmit button, holding down until through with transmission Depresses the transmit button, holding down until through with transmission (2 points)		
4	Announce “emergency traffic” (or department’s standard emergency traffic break-in message), interrupting air traffic as necessary.		
5	Transmit emergency traffic message following department’s SOPs, using department' codes, SOPs, or class procedures.		
	Call a Mayday and communicate all LUNAR aspects with Command: (LUNAR) location, unit, name, assignment, resources needed.		
6	Repeat message until Command verifies by repeating that the message is understood. **NOTE: ASSESSMENT ADMINISTRATOR WILL VERIFY INFORMATION**		
7	Activate PASS device in “alarm” mode after communicating with Command and follows departmental guidelines) (2 points)		
	Follow departmental guidelines on positioning or actions completely and accurately.		
ASSESSMENT TOTAL		**18 POINTS POSSIBLE**	

FS1-6.14: Donning of SCBA

Students will demonstrate the donning of SCBA while wearing full protective equipment in less than 60 seconds using the over the head method (OSFM 2-6.15, NFPA 1001 5.3.1B)

Overview

- This performance assessment guides the student through the proficiencies required in the task of donning of SCBA while wearing full protective gear, using the over the head method in 60 seconds or less.
- Students should be provided with the scorecard (next pages) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.
- The steps given in this skill sheet are general procedures for donning an SCBA. The specific SCBA manufacture’s recommendations for donning and use of SCBA should always be followed.

- Students should complete this assessment using the same type of equipment used during instruction, for which they have already learned the manufacturer's recommendations.
- Other assessment administrators (as applicable) should be informed by the instructor of recommendations for this equipment.

Starting Position:

- The student will start the activity with the following protective gear on:
  - Bunker pants
  - Structural firefighting boots
  - Turnout coat
  - Nomex hood
- The students' helmet and structural firefighting gloves are at their side ready to be donned at the end of the activity
- The complete SCBA with face shield should be laid out and checked out for service ready to don for the start of this activity.

When the student is ready the assessment administrator shall give the command "GO" and start the stopwatch.

Throughout the activity, the assessment administrator will be evaluating the student using theperformance task check list provided.

At the completion of Step 9 (hood, helmet, and gloves), the assessment administrator will stop the stopwatch, then score Step 10 (time limit)

Equipment & Materials

- Full protective gear (see above list)
- Complete SCBA with face shield
- PASS device (if available)
  - If this device is not available, clarify step #8 with student – that they are to state they are checking this even though it is not there
- Stopwatch

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
6.14 Donning SCBA	30 points	27-29 points	21-26 points	< 21 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will confirm that:

- The student is wearing the following protective gear:
  - Bunker pants
  - Structural firefighting boots
  - Turnout coat
  - Nomex hood

- The students' helmet and structural firefighting gloves are at their side ready to be donned at the end of the activity
- The complete SCBA with face shield is laid out and checked out for service ready to don for the start of this activity.
- If the unit does not have a PASS device, tell the student that at the appropriate point (Step #8) they should verbally state that they would be activating this device.
- When the student is ready the assessment administrator shall give the command "GO" and start the stopwatch.
- Observe the student's performance and record the appropriate score and any comments for each step.
- At the completion of Step 9 (hood, helmet, and gloves), the assessment administrator will stop the stopwatch, then score Step 10 (time limit).

Table 4. Criteria Scorecard: Donning SCBA

Criteria Scorecard: Donning SCBA		2 points each	Comments
1	• Position SCBA with valve end of the cylinder away from the body • Full points for positioning the SCBA with the valve of the cylinder away from the student. • In the instance a student puts the cylinder down with the valve toward them, no points deducted if when the student stands up the SCBA to open and read the pressure, the harness is toward the student		
2	**Open Valve Slowly** • Full points for opening the valve of the cylinder slowly, student shall now call out the pressure on the cylinder. • Cylinder at least 90% full, student should call out the pressure on the cylinder. • Full points for the student that states the psi numbers of the cylinder • No points if the student does not call out the psi numbers of the cylinder, the statement "full" is not the correct response. **Low Pressure Alarm Sounds** • Full points for the student who waits to hear the low-pressure alarm as opening the valve. **Valve Fully Open** • Full points for the student opening the valve fully. Assessment administrator will check the valve to see if the valve is open fully, deduct 2 points if found not completely opened.		

Criteria Scorecard: Donning SCBA		2 points each	Comments
3	• Raise the SCBA overhead while guiding elbows into the loops formed by shoulder straps. Grasp both sides of the harness assembly. • Full points for grasping both sides of the harness assembly to raise the SCBA overhead while guiding elbows into the loops of the shoulder straps. • No points if anything other than the harness is grabbed for this activity.		

4	Release the harness assembly and allow the SCBAto slide down the back. • Full points for releasing the harness assembly and allowing the SCBA to slide down the backinto position. • No points if the SCBA is dropped at this point of the activity or if a strap is missed		
5	Fasten chest strap, buckle waist strap, and adjust shoulder straps. • Full points for fastening shoulder/chest straps, then buckling waist strap, and then adjusting shoulder/chest straps if needed. • No points if not completed in this exact order.		
6	**Don facepiece** • Full points for donning facepiece correctly per manufacturer's recommendations. • Check facepiece seal (negative seal check) No air leakage. • Full points for donning facepiece with no leak and performing the negative seal check per manufacturer's recommendations. • No points if the student does not perform the negative seal check.		
7	Connect air supply to face shield. Take normal breaths. • Full points for connecting the regulator to the face shield, in proper position according to manufacturer's recommendations, then takinga normal breath to open the air flow for breathing.		

	• No points if the regulator is not locked into position.		
8	**Activate PASS device** • Full points for activating PASS device. • If a PASS device is not available to activate, full points if student verbally states that they are activating the device. • No points if this step is missed.		
9	**Don hood, helmet, and gloves** • Full points donning the hood now, then helmet, and then gloves to finish the activity • No points if not done in this exact order. • No skin exposed around face shield • Full points if the hood is in proper position with no skin exposed around face shield • No points if skin is exposed anywhere around the face shield.		

10	Donning shall be completed in 60 seconds or less Full points for donning of the SCBA by the over the head method in 60 seconds or less No points if donned in more than 60 seconds.		
ASSESSMENT TOTAL		**30 POINTS POSSIBLE**	

FS1-6.19: Inspecting SCBA

Students will demonstrate the inspection procedures for the main components of SCBA.

Overview

This performance evaluation will guide the student through the proficiencies required in the task of inspecting SCBA and preparing the SCBA for reuse. Students should be provided with the scorecard (next pages) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

The steps given in this assessment are general procedures for inspecting SCBA and preparing SCBA for reuse. The specific SCBA manufacture's recommendations should always be followed.

- Students should complete this assessment using the same type of equipment used during instruction, for which they have already learned the manufacturer's recommendations. They should be reminded to always follow the recommendations for the specific SCBA unit that your class is using. For example, on some SCBA, the audible alarm does not sound when the cylinder valve is opened and not all facepieces are designed for a seal check without the regulator being attached and activated.
- Other assessment administrators (as applicable) should be informed by the instructor of recommendations for this equipment.

- **Step #3:** Student states what to do if dirty or damaged components are found
- In the classroom/assessment setting, dirty or damaged components typically would not be found. Therefore, during this step THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, "WHAT SHOULD YOU DO IF YOU DIRTY OR DAMAGED COMPONENTS ARE FOUND?"
- **Step #6:** The student should state the procedure that would be followed if a leak is detected and the malfunction cannot be corrected in the field.
- In the classroom/assessment setting, a leak typically would not be detected. Therefore, during this step THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, "WHAT SHOULD YOU DO IF A LEAK IS DETECTED AND THE MALFUNCTION CANNOT BE CORRECTED IN THE FIELD?"
- **Step #13:** Place SCBA components so that they can be accessed quickly for donning in the event of a reported emergency. If the location is not available, student should state the location where the components should be placed
- Before starting the assessment, the assessment administrator should inform or remind the student the local instructions for the designated area where the SCBA components should be placed

Equipment & Materials

- Full protective gear (Optional, as determined by instructor)
- Complete SCBA with facepiece
- PASS device (if available) If this device is not available, clarify step #8 with student – they are to state they are checking this even though it is not there.

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
6.19 Inspecting SCBA	26 points	23-25 points	18-22 points	< 17 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will:

- Confirm that the SCBA equipment is ready to be inspected at the assessment site.
- Inform/remind the student the designated area where the SCBA components should be placed after the assessment (Step #13)
- If the SCBA unit does not have a PASS device, tell the student that at the appropriate point during the inspection (Step #8) they should verbally state what they would be doing to check this device.
- Tell the student when they should begin, stating, "You should start by identifying and verbally naming the main components of the SCBA. You then should inspect each component and prepare the SCBA for reuse. You may begin."
- Observe the student's performance and record the appropriate score and any comments for each step.
- Ask the student questions during Steps #3 and #6 as indicated on the scorecard.

Table 5. Criteria Scorecard: Inspecting SCBA

Criteria Scorecard: Inspecting SCBA		2 points each	Comments
1	Identify all components of SCBA are present: harness assembly, cylinder, facepiece, PASS device. • Full points for identifying all four components. All points shall be deducted for any one missing component		
2	Inspect all components of SCBA for cleanliness and damage. • Full points for putting hands on all the components of the SCBA unit, to inspect it for cleanliness and damage. • No points for only doing a visual, without putting hands on all the components of the SCBA unit.		
3	Student states what to do If dirty or damaged components are found. **THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, "WHAT SHOULD YOU DO IF YOU DIRTY OR DAMAGED COMPONENTS ARE FOUND?** • Full points if student states that dirty components are to be cleaned immediately and if damage is found, removed from service and tagged and reported to an officer. • No points if the student does not state both.		
4	Student checks the cylinder and states that it is full at 90%-100% of capacity. • Full points if the student visibly checks the cylinder pressure and verbally states that the cylinder is full at 90 to 100% of capacity. • No points if the student does not both visibly check and state.		
5	Open the cylinder valve slowly; verify the operationof the low air alarm and the absence of audible air leaks. • Full points for opening the cylinder valve slowly, verifying the operation of the low air alarm and the absence of audible air leaks.		

	• No points if any part of this step is missed		
6	The student should state the procedure that would be followed if a leak is detected and the malfunction cannot be corrected in the field. **THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, "WHAT SHOULD YOU DO IF A LEAK IS DETECTED AND THE MALFUNCTION CANNOT BE CORRECTED IN THE FIELD?"** • Full points if they state that an SCBA with audible leaks due to malfunctions shall be removed from service, tagged, and reported to the officer.		
7	Check that gauges and/or indicators (i.e. heads-up display) are providing similar pressure readings. Manufacturer's guidelines determine the acceptable range. • Full points if the student visibly checks that gauges and/or indicators provide similar pressure readings (Generally within 100 psi.) • No points if the student does not check all gauges and/or indicators.		
8	Check function (all modes) of PASS device. If thereis no PASS device on the unit, the student should verbally state that they would check the PASS device at this point. • Full points for the student that checks the functions (all Modes) of the PASS device of their unit. • If a PASS device is not available to check, full points if student states that they are checking the device • No points if not checked for the unit that is in use or stated.		

9	Don facepiece and check for proper seal. • Full points for demonstrating proper donning of the facepiece and checking for proper seal. • No points if student does not perform a proper seal check for the unit that they are using, per manufacturer's recommendations.		

10	Don regulator and check function by taking several normal breaths. • Full points for demonstrating proper donning of the regulator and checking for functionalityof the unit by taking several breaths. • No points if the student does not both don the regulator and take several normal breaths.		
11	Check bypass and/or purge valve. • Full points for demonstrating that bypass and/or purge valve operate by opening the valve to allow air into the facepiece. Then turn the valve off. • No points for the student that cannot demonstrate this procedure, per manufacturer's recommendations.		
12	Remove facepiece and prepare all components for immediate reuse. • Full points for the student that can demonstrate the removal of the facepiece and prepare all the components for immediate reuse. This includes: cylinder valve turned off, system bled off, PASS device reset (if there is one on the unit), and all straps extended. • No points if any one of these items is missed.		
13	Place SCBA components so that they can be accessed quickly for donning in the event of a reported emergency. If the location is not available, student should state the location where the component should be placed. • Full points for demonstrating or stating the proper location for stowing of the SCBA so that it can be accessed quickly for donning in the event of a reported emergency, per local instructor/classroom. • No points if the student cannot demonstrate or tell you the location.		
ASSESSMENT TOTAL		**26 POINTS POSSIBLE**	

FS1-6.25: Shifting SCBA

Students will demonstrate the use of SCBA in exiting through areas with restricted openings in emergency situations: Shifting

Overview

This performance assessment guides the student through the proficiencies required in the task of exiting through areas with restricted openings in emergency situations. Students should be provided with the scorecard (next pages) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

Students must be familiar with the SCBA used in their school/area.

Remind the student that the scenario that is used forces them to pass through a restricted opening to exit a possible hazardous atmosphere. This performance task is an extreme situation and is meant to also teach the student the ability to call a MAYDAY and attempt to rescue themselves. Remind studentsto remain calm, think about their surroundings, and think about their options.

Step #7: In the classroom/assessment setting, students typically would be able to pass through the restricted opening. Therefore, during this step the assessment administrator asks the student what they should do if they are unable to pass through the restricted opening.

Equipment & Materials

- Obstacle course with constricted openings/exits/passage: The obstacle course used should have a standard stud wall that should be used to teach and assess this skill. The studs should be spaced 16 inches (406 mm) on center.
- Full protective gear
- SCBA

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
6.25 Shifting SCBA	22 points	19-21 points	14-18 points	< 14 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will:

- Confirm that the protective gear, SCBA, and constricted passage (stud wall 16” on center) are ready to use for the assessment.
- Inform/remind the student to follow the recommendations for the specific equipment and to always follow the instructor’s directions and all safety procedures of the classroom.
- When it’s time to start, tell the student, “This performance task simulates an extreme situation. It is important to remain calm, think about your surroundings, and think about your options. You will start by donning the protective gear and SCBA. You’ll then proceed through the constricted passage and follow the appropriate procedures to adjust the equipment. After exiting the area you’ll doff the gear. At that point, I will ask you some questions. You may begin.”
- Observe the student’s performance and record the appropriate score and any comments for each step.
- Ask the student the questions during Step #7 as indicated on the scorecard.

Table 6. Criteria Scorecard: Shifting SCBA

Criteria Scorecard: Shifting SCBA		2 points each	Comments
1	Don full personal protective gear and SCBA properly, on air, ready to enter constricted passagearea, ready to work safely. • Full points for the student who dons his/her gear properly, ready to enter the obstacle course. • No points if the student has not donned his/her PPE and SCBA properly, ready to work safely.		
2	Enter the constricted passage area, studs spaced 16” on center. Check opening with hand(s) before attempting to negotiate the obstacle. • Full points for the student that enters the intended obstacle area and checks the opening with their hand (s) before attempting to negotiate the obstacle. • No points if they do not check with their hands first.		
3	Change body position, rotate body 45 degrees and try to get through the constricted passage without any change in SCBA. • Full points for the student who repositions their body properly to attempted to negotiate the constricted passage, without any change in the SCBA. • No points if the student does not attempt the opening before changing/shifting their SCBA		
4	Reduce profile and attempt to pass through constricted passage. Full points (8 possible) for the student who can perform the task of “Reduced Profile” and complete the performance task without missing any one of the following parts: • Loosen right shoulder strap • Loosen waist strap • Shift tank to your left shoulder • On through with your right shoulder first		
5	Exit hazardous area and verbally notify Command when safe.		

Criteria Scorecard: Shifting SCBA		2 points each	Comments
	• Full points for the student who states they have notified the IC that they are out and in a safe area. • No points if there is if verbal notification is not given		

6	Student states that they are clear of the hazardous area and can now doff SCBA and personal protective gear. Doff the gear. • Full points for the student who states that they are clear of the hazardous area and then doffs their SCBA and PPE • No points if the student does not state that they are now clear of the hazardous area, before doffing their gear.		
7	THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, “WHAT IF YOU CANNOT PASS THROUGH THE RESTRICTED OPENING? WHAT SHOULD YOU DO?”		
	• Student states that they would communicate with Command and call a Mayday, using (LUNAR) location, unit, name, assignment, resources needed. • Full points to the student who states all the components: notify IC, call a Mayday and communicate LUNAR • No points if any one of these is not stated		
	• Student states that they would activate PASS device in “alarm” mode after communicating with Command. • Full points to the student who states that they would activate PASS device in “alarm” mode after communicating with IC. • No points if this is not verbally stated		
ASSESSMENT TOTAL		**22 POINTS POSSIBLE**	

FS1-6.28: Changing SCBA Cylinder, Single Person

Students will demonstrate an air cylinder exchange while the SCBA is not worn by a firefighter.

Overview

This performance assessment guides the student through the proficiencies required in the task of changing an SCBA cylinder. Changing cylinders can be either a one-person or a two-person job. This assessment is for the one-person method for changing a cylinder.

Students should be provided with the scorecard (next pages) in advance, with corresponding instructionand opportunity for practice using the same equipment they will use for the assessment.

Reminders verbally given to all students immediately prior to the assessment:

- Remind the student to always follow the recommendations for the specific cylinders your department uses. On some SCBA, the audible alarm does not sound when the cylinder valve is opened. Students must know the operation of the unit that they are using.
- Remind the student that they should always check the cylinders' capacity to maintain a 90-100% on the cylinders' capacity, their life may depend upon it!
- Remind the student to not cut corners! The student should follow a consistent routine for all aspects of PPE/SCBA.

Step #6: Remove the empty cylinder from harness assembly. Before starting the assessment, the assessment administrator should inform or remind the student the local instructions for (1) how to markthe spent cylinder and (2) the designated area where the spent cylinder should be placed.

Step #8: Checking for debris in line. In the classroom/assessment setting, debris typically would not be found in the line. Therefore, during this step the assessment administrator asks the sutdnet what they should do if they find debris in the line.

Step #12: Malfunction that cannot be corrected in the field. The assessment administrator should ask the student what they should do if an audible leak is detected and the malfunction cannot be correctedin the field.

Equipment & Materials

- Full protective gear (optional), determined by assessment administrator
- SCBA unit, as determined by instructor
- Replacement cylinder 90-100% of capacity
- Salvage cover – the designated area where spent cylinder should be placed

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
6.28 Changing cylinder	28 points	25-27 points	19-24 points	< 19 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will:

- Take the SCBA equipment to be changed to the assessment site.
- Inform/remind the student the local instructions for (1) how to mark the spent cylinder and (2) the designated area where the spent cylinder should be placed (Step #6)
- When it's time to begin, tell the student, "Your task is to change the SCBA cylinder following the recommendations for this type of cylinder, as learned in class. You should always check the cylinder's capacity to maintain a 90-100% capacity, your life may depend upon it! When you get to

this part of the process, you should verbally state the capacity. Do not cut corners! You maybegin."

- Observe the student's performance for each step. Record the appropriate scores and any comments.
- Ask the student questions during Steps #8 and #12 as indicated on the scorecard.

Table 7. Criteria Scorecard: Changing cylinder

Criteria Scorecard: Changing cylinder		2 points each	Comments
1	Place the SCBA unit on a firm surface • Full points for placing the SCBA unit laying down on any solid surface • Standing the SCBA unit up should be a one point deduction, because this is not a recommended practice		
2	Close the cylinder valve • Full points for closing the cylinder valve fully by pushing in on the valve and then turning clockwise. • If the student does not get the valve closed fully, but self- corrects before continuing to the next step: no deductions.		
3	Bleed air pressure from high- and low-pressurehoses. • Full points for bleeding the air pressure from high and low pressure hoses, down to the pointwhen the low air alarm stops sounding. • No points if the unit is not bled to the point when the alarm sounds.		
4	Disconnect the high-pressure line from the cylinder. • Full points for disconnecting the high-pressure line from the cylinder. • No points if student attempts to disconnect the high-pressure line/coupling nut without having bled the pressure in step #3.		
5	Release clamp(s) on empty cylinder • Full points for releasing the clamp (s) on empty cylinder. No points if clamps are not released. **Note: Steps 4 and 5 can be done in reverse order without any deductions (i.e., Step 5 can be done first, followed by Step 4.)**		

Criteria Scorecard: Changing cylinder		2 points each	Comments
6	Remove the empty cylinder from harness assembly. Mark the spent cylinder, per local instructions. Place on ground or salvage cover, in designated area, per local instructions. • Full points for removing the empty cylinder from the harness, marking it appropriately, and placing it in the proper location. • One point deducted for not marking the empty cylinder correctly, per local instructions • One point deducted for not placing the empty cylinder in the designated area, per local instructions		

7	State that the replacement cylinder is 90-100% of rated capacity. • Full points for checking the replacement cylinder and stating that it is 90-100% of rated capacity. • No points if not both checked and verbally stated at this point in the task.		
8	Check the cylinder valve opening and the high-pressure hose fitting for debris • Full points for checking the cylinder valve opening and the high-pressure hose fitting for debris. • One point deduction if the student only does one and not the other. **THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, "WHAT SHOULD YOU DO IF YOU FIND DEBRIS IN THE LINE?** The student should state the procedure that would be followed if debris was found in the high-pressure line. • Full points for stating they should quickly open and close cylinder valve • No points if they state an incorrect procedure.		

9	Place the new cylinder into the backpack with the cylinder outlet in the correct position. Lock the cylinder in place. • Full points for proper placement of the new, full, cylinder into the harness. • Full points for completing both points of lock down. • One point deduction if the student misses either of the points of lock down.		
10	Connect the high-pressure hose to the cylinder and hand-tighten • Full points for connecting the high-pressure hose to the cylinder, hand tighten only. • No points if cross threading		
11	Slowly and fully open the cylinder valve and listen for an audible alarm and leaks as the system pressurizes. • Full points for slowly and fully opening of the cylinder valve and listening for audible alarm(s) and leaks as the system pressurizes • No partial points. All or none.		

12	THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, "WHAT IF AN AUDIBLE LEAK IS DETECTED AND THE MALFUNCTION CANNOT BE CORRECTED IN THE FIELD?" The student should state the procedure that would be followed if a leak is detected and the malfunction cannot be corrected in the field. • Full points if the student states that the SCBA should be removed from service, tagged, and reported to the officer. • No points if the student does not state any one of the three actions or states any other procedure.		
ASSESSMENT TOTAL		**28 POINTS POSSIBLE**	

FS1-7.5: Demonstrate Extinguishment of CLASS A Fire

Students will demonstrate the extinguishment of the following classes of fires using the appropriate portable fire extinguisher: Class A

Overview

- A firefighter needs to be aware of the distinct types of fire extinguishers, their use and limitations, and proper and effective application.
- In this performance assessment, an individual student demonstrates the ability to properly and safely use a stored pressure water extinguisher to extinguish a CLASS A fire.
- Baseline assessment that focuses on a specific, individual skill.
- Assessment takes place during the course.
- Students should be provided with the scorecard (next pages) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

Equipment & Materials

- Full Protective clothing
- Stored pressure water extinguisher
- Small Class A fire or facsimile, suitable size for an extinguisher
- Tags for labeling spent cylinder

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
FS1-7.5 Demonstrate extinguishment of CLASS A fire	20 points	17-19 points	13-16 points	< 13 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will:

- Take the stored pressure water extinguisher and tag to the assessment site.
- Prepare the small Class A fire or facsimile.
- Tell the student to begin. Observe the student's performance for each step. Record the appropriate scores and any comments.

Table 8. Criteria Scorecard: Extinguishment of CLASS A fire

Criteria Scorecard: Extinguishment of CLASS A fire		**2 points each**	**Comments**
1	Size up fire, ensuring that it is safe to fight with an extinguisher. • Full points for stating why the fire is safe to fight with a Class A Extinguisher (2 points)		
2	Pull pin at top of extinguisher to break the inspection band (2 points)		
3	Test to ensure proper operation. • Point nozzle horn in safe direction (1 point) • Discharge very short test burst (1 point)		

Criteria Scorecard: Extinguishment of CLASS A fire		2 points each	Comments
4	Carry extinguisher to within stream reach of fire. • Appropriate escape route identified and stated (1 point) • Approach upwind of fire (1 point)		
5	Aim nozzle toward base of fire (2 points)		
6	Discharge extinguishing agent (2 points) • Squeeze handle and sweep slowly back and forth across entire width of fire (2 points)		
7	Cover entire area with water until fire is completely extinguished (2 points)		
8	Exit fire area in safe manner, ensuring situational awareness/does not turn away from fire area (2 points)		
9	Tag extinguisher for recharge and inspection (2points)		
ASSESSMENT TOTAL		**20 POINTS POSSIBLE**	

FS1-7.6: Demonstrate Extinguishment of CLASS B Fire

Students will demonstrate the extinguishment of the following classes of fires using the appropriate portable fire extinguisher: Class B (OSFM 2-7.7, NFPA 1001 5.3.16B)

Overview

- A firefighter needs to be aware of the diverse types of fire extinguishers, their use and limitations, and proper and effective application.
- In this performance assessment, an individual student demonstrates the ability to properly and safely use a dry chemical (ABC) extinguisher to extinguish a CLASS B fire.
- Baseline assessment that focuses on a specific, individual skill.
- Assessment takes place during the course.
- Students should be provided with the scorecard (next pages) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

Equipment & Materials

- Full Protective clothing
- Dry Chemical (ABC) extinguisher
- Small Class B fire or facsimile, suitable size for an extinguisher
- Tags for labeling spent cylinder

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory**

				< 70%
FS1-7.6 Demonstrate extinguishment of CLASS B fire	20 points	17-19 points	13-16 points	< 13 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will:

- Take the dry chemical (ABC) extinguisher and tag to the assessment site.
- Prepare the small Class B fire or facsimile.
- Tell the student to begin. Observe the student's performance for each step. Record the appropriate scores and any comments.

Criteria Scorecard: Operating a Dry Chemical (ABC) Extinguisher		**2 points each**	**Comments**
1	Size up fire, ensuring that it is safe to fight with an extinguisher. • Full points for stating why the fire is safe to fight with a dry chemical (ABC) extinguisher (2 points)		
2	Pull pin at top of extinguisher to break the inspection band (2 points)		
3	Test to ensure proper operation. • Point nozzle horn in safe direction (1 point) • Discharge very short test burst (1 point)		
4	Carry extinguisher to within stream reach of fire. • Appropriate escape route identified (1 point) • Approach upwind of fire (1 point)		
5	Aim nozzle toward base of fire (2 points)		
6	Discharge extinguishing agent (2 points) • Squeeze handle and sweep slowly back and forth across entire width of fire (2 points)		
7	Cover entire area with water until fire is completely extinguished (2 points)		
8	Exit fire area in safe manner, ensuring situational awareness/does not turn away from fire area (2 points)		
9	Tag extinguisher for recharge and inspection (2points)		
ASSESSMENT TOTAL		**20 POINTS POSSIBLE**	

FS1-8.11: Demonstrate the Two-Firefighter Low Shoulder Carry*Students will demonstrate the two firefighter-low shoulder carry.* Overview

- Performance assessment in which students, as part of a two-person team, demonstrate the ability to properly and safely remove/carry an extension or single ladder.
- Baseline assessment that focuses on satisfactory demonstration of skill as part of a two-person team.
- Assessment takes place during the course.
- Each student shall be evaluated in the role of "Firefighter #1" and as "Firefighter #2". Students will perform this carry two times, with one of the students as Firefighter #1 the first time and the other as Firefighter #1 the second time.
- For the assessment, TWO copies of pages 2-4 of this document will be needed:
    - Two scorecards (pages 2-3) Complete one scorecard during each performance.
    - Two student "Score Summary Sheets" (page 4) Fill out one summary sheet for each student after the two performances are done.
- Students should be provided with the scorecard (next pages) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

Equipment & Materials

- Full Protective clothing
- One 24-foot (8 m) extension or single ladder

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
8.11 Demonstrate the two firefighter-low shoulder carry	34 points	27-33 points	24-26 points	< 24 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will:

- Take the ladder and two copies of the scorecard to the assessment site.
- Explain to the two students that they will perform this carry two times, with one of them as Firefighter #1 the first time and the other as Firefighter #1 the second time.
- Clarify which student will begin as Firefighter #1. Label the scorecard accordingly.
- Tell the students to begin.
- Observe the students' performance for each step. Record the appropriate scores and any comments for both students.
- Repeat with the roles reversed. Use the second scorecard.
- Transfer the scores earned by each student to a "Score Summary Sheet" (page 4) for that individual student. Share the scorecards with details with both students.

Table 9. Criteria Scorecard: Demonstrate the two firefighter-low shoulder carry

Criteria Scorecard: Demonstrate the two firefighter-low shoulder carry		2 points each		Comments
		Firefighter1	Firefighter2	
1	Both Firefighters: Kneel on the same side of the ladder facing the tip (2 points).			
2	Both Firefighters: Grasp a convenient rung with the near hand, palm forward (2 points).			
3	Both Firefighters: Stand the ladder on edge (2 points)			
4	Firefighter #1: Give the command to "shoulder the ladder" (2 points).			
5	Both Firefighters: Stand, starting in a squat position and lifting the ladder with the legs, rather than the back (2 points)			
6	Both Firefighters: Tilt the far beam upward as the ladder and the firefighters rise (2 points)			
7	Both Firefighters: Pivot and place the free arm between two rungs. • Both firefighters facing the butt (1 point) • Lifting smoothly and continuously (1 point)			
8	Both Firefighters: Place the upper beam on the shoulders (2 points).			
ASSESSMENT TOTAL		18 points possible	16 points possible	**34 points possible**

FS1-8.20: Two Firefighter Extension Ladder Raise (Flat Raise)

*Demonstrate the two-firefighter extension ladder raise (flat raise)*Overview

- Performance assessment in which students, as part of a two-person team, demonstrate the ability to properly and safely position, raise, and secure a 24-foot or 28-foot extension ladder.
- Baseline assessment that focuses on satisfactory demonstration of skill as part of a two-person team.
- Assessment takes place during the course.

- Each student shall be evaluated in the role of “Firefighter #1” and as “Firefighter #2”. Students will perform this carry two times, with one of the students as Firefighter #1 the first time and the other as Firefighter #1 the second time.
- For the assessment, TWO copies of pages 2-4 of this document will be needed:
    - Two scorecards (pages 2-3) Complete one scorecard during each performance.
    - Two student “Score Summary Sheets” (page 4) Fill out one summary sheet for each student after the two performances are done.
- Students should be provided with the scorecard (next pages) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

Equipment & Materials

- Full Protective clothing (excluding SCBA)
- One 24-foot or 28-foot extension ladder

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
FS1-8.20 – Demonstrate the two-firefighter extension ladder raise (flat raise)	38 points	34-37 points	27-33 points	< 27 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will:

- Take the ladder and two copies of the scorecard to the assessment site.
- Explain to the two students that they will perform this carry two times, with one of them as Firefighter #1 the first time and the other as Firefighter #1 the second time.
- Clarify which student will begin as Firefighter #1. Label the scorecard accordingly.
- Tell the students to begin.
- Observe the students’ performance for each step. Record the appropriate scores and any comments for both students.
- Be prepared to intervene as needed for safety, especially in Steps 9, 10 and 11 when the ladder is in vertical position
- Repeat the performance with the roles reversed. Use the second scorecard.
- Transfer the scores earned by each student to a “Score Summary Sheet” (page 4) for that individual student. Share the scorecards with details with both students.
- **Note: Assessment administrator should intervene if necessary, to maintain safety**

Table 10. Criteria Scorecard: Demonstrate the two firefighter-low shoulder carry

Criteria Scorecard: Demonstrate the two-firefighter extension ladder raise (flat raise).		2 points each		Comments
		Firefighter1	Firefighter2	
1	Firefighter #1: Place the butt end on the ground (2 points).			
2	Firefighter #2: Rest the ladder beam ona shoulder (2 points).			
3	Firefighter #1: Heel the ladder by standing on the bottom rung (2 points).			
4	Firefighter #1: Crouch down to grasp a convenient rung or the beams with both hands (2 points).			
5	Firefighter #1: Lean back (2 points)			
6	Firefighter #2: Step beneath the ladder(2 points)			
7	Firefighter #2: Grasp a convenient rung with both hands (2 points)			
8	Firefighter #2: Advance hand-over-hand down the rungs toward the butt end until the ladder is in a vertical position (2 points)			
9	Firefighter #1: Grasp successively higher rungs or higher on the beams as the ladder comes to a vertical position until standing upright (2 points)			
10	Both Firefighters: Face each other (2 points) **Ladder should be in a vertical position.**			
11	Both Firefighters: Heel the ladder by placing toes against the beams (2 points) **Ladder should be in a vertical position.**			
12	Firefighter #1: Grasp the halyard (2 points)			
13	Firefighter #1: Extend the fly section with a hand-over-hand motion until the			

Criteria Scorecard: Demonstrate the two-firefighter extension ladder raise (flat raise).		2 points each		Comments
		Firefighter1	Firefighter2	
	tip reaches the desired elevation. Engage the ladder locks (2 points)			
14	Firefighter #2: Grasp the beams (2 points)			
15	Both Firefighters: Lower the ladder gently onto the building. • Place one foot against a butt spur or on the bottom rung using the proper heeling method (2 points)			
16	Firefighter #2: Ties the halyard utilizing a clove hitch with safety (2 points)			
ASSESSMENT TOTAL		20 points possible	18 points possible	**38 points possible**

FS1-9.7: Hose Rolls

Students will demonstrate the following types of hose rolls: straight roll, donut roll, twin donut roll, and self-locking twin donut roll

Overview

- Performance and Product assessment in which an individual student demonstrates abilities to properly roll the hose in each of four ways: Straight Roll, Donut Roll, Twin Donut Roll, and Self-Locking Twin Donut Roll
- This is an intermediate assessment. It is a structured task that requires two or three specified baseline skills
- Assessment takes place during the course.
- For this assessment, students will take a 50-foot section of hose and roll it in accordance to the given objective. Certain rolls require a step by step process to accomplish the task. These steps must be done in order.
- The assessment emphasizes the quality of the final, rolled hose. Various techniques can be used to do the rolls, depending on what has been taught in class.
- Students should be provided with the scorecard (next pages) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

Straight Roll, Step 1

THE ASSESSMENT ADMINISTRATOR REQUESTS EITHER AN IN-SERVICE OR AN OUT-OF-SERVICE STRAIGHT ROLL. This should be randomly determined. Possible techniques:

- Print each option on a 3X5 card. Student draws.
- Student rolls a dice/die
  - Even number = in-service

- Odd number = out-of-service
- Student flips a coin
  - Head = in-service
  - Tail = out-of-service

Equipment & Materials

- 50-foot section of 1¾", 2½", and/or 3" hoseline
- A pair of gloves (leather, utility, or structural firefighting)

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
9.7 Hose Rolls: Straight Roll, Donut Roll, Twin Donut Roll, and Self-Locking Twin Donut Roll	28 points	25-27 points	19-24 points	< 19 points

Using a technique taught in class, the student will achieve a quality straight roll as requested: in-service or out of service.

Table 11. Criteria Scorecard: Hose Rolls: In-Service or Out of Service - Straight Roll

Criteria Scorecard: Hose Rolls: In-Service or Out of Service - Straight Roll		**2 points each**	**Comments**
1	**THE ASSESSMENT ADMINISTRATOR REQUESTS EITHER AN IN-SERVICE OR AN OUT-OF-SERVICE STRAIGHT ROLL.** Based on the type of roll requested, student starts at one coupling and rolls the hose along the ground until they get to the other coupling. • In-Service: Student begins at the male coupling and rolls toward the female coupling (2 points); OR • Out of Service: Student begins at the female coupling and rolls hose toward the male coupling (2 points)		
2	Tight, flat roll • Hose is tight (1 point) • Hose is flat (no cinnamon roll) (1 point)		
ASSESSMENT TOTAL		**4 points possible**	

Using a technique taught in class, the student will achieve a quality donut roll.

Table 12. Criteria Scorecard: Hose Rolls: Donut Roll

Criteria Scorecard: Hose Rolls: Donut Roll		2 points each	Comments
1	Hose position. Start in appropriate position depending on the technique being used. • Laid straight, offset from center (2 points); OR • Male coupling pulled back within 3 feet of female coupling (2 points); OR • Straight line, starting 2 feet toward the male (2 points); OR • Another acceptable method, per instructor (2 points)		
2	Joined couplings • Male coupling's thread ends up on the inside of the female coupling and is protected (1 point) • Male coupling at 12 o'clock, female in 3 o'clock to 6 o'clock position (90 to 180 degrees) (1 point)		
3	• Hose is tight (1 point) • Hose is flat (no cinnamon roll) (1 point).		
ASSESSMENT TOTAL		**6 points possible**	

Using a technique taught in class, the student will achieve a quality twin donut roll.

Table 13. Criteria Scorecard: Hose Rolls: Donut Roll

Criteria Scorecard: Hose Rolls: Twin Donut Roll		2 points each	Comments
1	Fold the hose in half so male and female couplings are side by side (2 points)		
2	Roll the hose toward the couplings, forming two rolls side by side (2 points)		
3	• Hose is tight (1 point) • Hose is flat (no cinnamon roll) (1 point).		

Criteria Scorecard: Hose Rolls: Twin Donut Roll	2 points each	Comments
ASSESSMENT TOTAL	6 points possible	

Using a technique taught in class, the student will achieve a quality self-locking twin donut roll.

Table 14. Criteria Scorecard: Hose Rolls: Self-Locking Twin Donut Roll

	Criteria Scorecard: Hose Rolls: Self-Locking Twin Donut Roll	2 points each	Comments
1	Fold the hose in half and leave the male and female couplings. • Two equal rolls of the same hose, one with the male coupling, and the other with the female coupling (2 points)		
2	Grab the folded end and move it forward about 3 feet. • Create two large loops on each side (2 points)		
3	Roll the hose back toward the couplings, forming two rolls side by side (2 points)		
4	Complete the roll and grab one of the loops and pull some of the slack through, making one large loop and one small loop (2 points).		
5	Feed the large loop through the small loop and pull tight, making a self-locking loop that forms a carrying loop (2 points).		
6	• Hose is tight (1 point) • Hose is flat (no cinnamon roll) (1 point)		
ASSESSMENT TOTAL		12 points possible	

Score Summary	
Hose Roll Type	**Possible Points**
Straight	4
Donut	6
Twin Donut	6
Self-Locking Twin Donut	12
TOTAL	**28**

FS1-9.10: Hose Loads

Students will demonstrate the loading of the following hose loads: Accordion, Horseshoe, Flat, Minuteman, and Dutchman

Overview

- Performance and Product assessment in which an individual student demonstrates abilities to properly load and deploy the following five hose loads: Accordion, Horseshoe, Flat, Minuteman, and Dutchman
- This is an intermediate assessment. It is a structured task that requires two or three specified baseline skills
- Assessment takes place during the course.
- The assessment emphasizes the quality of the final, loaded hose. Various techniques can be used to do the loads, depending on what has been taught in class.
- Students should be provided with the scorecard (next pages) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

Equipment & Materials

- 1 ¾", 2 ½", and/or 3" hose
- Smooth Bore or Combination Nozzle
- Fire Engine
- A pair of gloves (leather, utility, or structural firefighting)

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
9.10 Hose Loads: Accordion, Horseshoe, Flat, Minuteman, Dutchman	52 points	47-51 points	36-46 points	< 36 points

Using a technique taught in class, the student will achieve a quality accordion hose load.

Table 15. Criteria Scorecard: Hose Load: Accordion

Criteria Scorecard: Hose Load: Accordion		2 points each	Comments
1	For the Accordion Load start by placing the coupling at the rear of the hose bed, along either the left or right edge. Lay the hose on its edge, toward the front of the hose bed. • Coupling is at the rear of the hose bed; hose is layered on its edge toward the front of the hose bed (2 points)		
2	Upon reaching the front of the hose bed, fold the hose back over itself and lay it back toward the rear of the bay • Hose is folded back over itself and laid back toward the rear of the bay (2 points)		
3	Continue this pattern until the entire hose bay is full. • Entire hose bay is filled with one layer of hose (2 points)		
4	For a second layer, offset the last fold to elevate the layer and continue loading in an accordion fashion. • Second layer is elevated and continues in an accordion fashion (2 points)		
5	Finish the load so the coupling is near the end of the bed and can be reached from the ground, but back far enough so it is secure. • Coupling is near end of the bed, can be reached from the ground, back far enough to be secure (2 points)		
ASSESSMENT TOTAL	**10 points possible**		

Using a technique taught in class, the student will achieve a quality Horseshoe Hose Load.

Table 16. Criteria Scorecard: Hose Loads: Horseshoe

Criteria Scorecard: Hose Loads: Horseshoe		2 points each	Comments
1	Start by placing the coupling at the back of the hose bed, along either the left or right edge. Lay the hose on its edge toward the front of the hose bed. • Coupling is placed at back of bed to start and hose is laid on edge (2 points)		
2	Upon reaching the front of the hose bed, continue along the perimeter of the hose bed, onthe front and opposite sides. • Hose load continues the front and opposite sides (2 points)		
3	Upon reaching the front of the hose bed, continue along the perimeter of the hose bed, onthe front and opposite sides. • After reaching front of hose bed, hose continues along perimeter of hose bed on the front and opposite sides (2 points)		
4	When you reach the rear of the hose bed, fold the hose back on itself and return along the perimeter of the hose bed to the other side. • Hose is folded back on itself and returns to other side (2 points)		
5	Continue until you have filled the hose bed. • Single layer of hose fills the bed (2 points)		
6	For a second layer of hose, continue the hose from the center of the bed, where you finished the first load, to the edge of second layer. • Second layer of hose continues from the center of the bed where the first load finished, and starts on the edge (2 points)		
7	Finish the load so the coupling is near the end of the bed and can be reached from the ground, but back far enough so it is secure. • Coupling is near end of the bed, can be reached from the ground, back far enough to be secure (2 points)		
ASSESSMENT TOTAL	**14 points possible**		

Using a technique taught in class, the student will achieve a quality flat hose load.

Table 17. Criteria Scorecard: Hose Loads: Flat

Criteria Scorecard: Hose Loads: Flat		2 points each	Comments
1	Start by placing the coupling at the front of the hose bed, along either the left or right edge. Lay the hose flat toward the rear of the bed. • Coupling at front and hose lays flat (2 points)		
2	At the rear of the bed, fold the hose over on itself, laying it flat up to the front of the hose bed. • Hose folds over on itself (2 points)		
3	When folding the hose over for the second pass, offset the rear fold to lay the hose next to the previous fold. • The rear fold is offset (2 points)		
4	Continue this pattern, moving back and forth along the hose bed, until the hose is completely loaded. • Pattern continues throughout the load (2 points)		
5	For a second layer of hose, continue the hose from the center of the bed, where you finished the first load, to the edge of the second layer. • Second layer of hose continues from the center of the bed where the first load finished, and starts on the edge (2 points)		
6	Finish the load so the coupling is near the end of the bed and can be reached from the ground, but back far enough so it is secure. • Coupling is near end of the bed, can be reached from the ground, back far enough to be secure (2 points)		

ASSESSMENT TOTAL	12 points possible

Using a technique taught in class, the student will achieve a quality Minuteman hose load.

Table 18. Criteria Scorecard: Hose Loads: Minuteman

Criteria Scorecard: Hose Loads: Minuteman		2 points each	Comments
1	Start by connecting the first 50 ft. length to proper discharge, load a portion of the hose on the bottom of the bed, place the remainder of the length aside for later loading. • Hose connects to proper discharge and places remainder aside (2 points)		
2	Next, join the remaining two lengths together, forming a 100 feet length. Place a nozzle on the male end and place the nozzle in the pre-connected bed on the side of the direction of pull. • Hose lengths are joined together, with nozzle on male end and nozzle placed on side of direction of pull (2 points)		
3	Once the nozzle is placed, flat load the rest of the 100-ft. length on top of the nozzle. • Length is on top of nozzle (2 points)		
4	Once all the 100-ft. length is loaded, couple the female coupling to the male coupling from the first 50 ft. length. • Male and female are coupled together at the correct location (2 points)		
5	Finally, flat load the rest of the original 50 ft. length of 1 1/2” or 1 3/4” attack hose with the nozzle attached. The finished load should be flat upon completion with no twists. • Nozzle is attached and hose is flat (2 points)		
ASSESSMENT TOTAL		**10 points possible**	

Using a technique taught in class, the student will achieve a quality Dutchman hose load.

Table 19. Criteria Scorecard: Hose Loads: Dutchman

Criteria Scorecard: Hose Loads: Dutchman		2 points each	Comments
1	Explain the purpose of this load. **THE ASSESSMENT ADMINISTRATOR ASKS THE STUDENT, "WHAT IS THE PURPOSE OF THIS LOAD? WHAT ARE YOU TRYING TO AVOID?"** • States that this load is used to try to avoid a coupling from flipping in the hose bed when deployed (2 points)		
2	Fold over an extra length of hose, thus shortening the hose. • Extra length of hose is folded over and hose is shortened appropriately (2 points)		
3	Reposition the coupling to allow it to deploy directly off the hose bed and will not flip when it comes out of the bed. • Coupling is repositioned to allow it to deploy directly off the hose bed without flipping (2 points)		
ASSESSMENT TOTAL		**6 points possible**	

Score Summary	
Hose Load Type	**Possible Points**
Accordion	10
Horseshoe	14
Flat	12
Minuteman	10
Dutchman	6
TOTAL	**52**

FS1-9.26: Deploying Minuteman

Demonstrate unloading pre-connected hoseline Minuteman

Overview

- Performance and Product assessment in which an individual student demonstrates abilities to properly demonstrate deploying the Minuteman Load.
- This is an intermediate assessment. It is a structured task that requires two or three specified baseline skills
- Assessment takes place during the course.

- The assessment emphasizes the demonstration of deploying a minuteman load.
- Students should be provided with the scorecard (next pages) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

Step #2. Move toward your objective indicated by the assessment administrator, as the hose plays out with your movement. **Before starting the assessment, the assessment administrator should inform the student the location of the objective.**

Equipment & Materials

- 1¾" hoselines
- Smooth Bore or Combination Nozzle
- Fire Engine
- A pair of gloves (leather, utility, or structural firefighting)

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
9.16 Deploying Minuteman	8 points	7 points	6 points	< 6 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will:

- Confirm that the needed equipment and materials are ready for the student's use at the assessment site.
- Inform/remind the student the objective location.
- Tell the student to begin. Observe the student's performance. Record the appropriate score and any comments for each step.

Table 20. Criteria Scorecard: Deploying the Minuteman Load

Criteria Scorecard: Deploying the Minuteman Load		**2 points each**	**Comments**
1	Grab the entire bundle from the hose bed, placing the bottom of the load and nozzle on your shoulder. • Entire bundle of hose on shoulder (2 points)		
2	Move toward your objective (location indicated by the assessment administrator) as the hose plays out with your movement. • Moving toward objective while hose plays out (2 points)		

Criteria Scorecard: Deploying the Minuteman Load		2 points each	Comments
3	Upon arrival of objective, flake out the remainderof the working line that is left on your shoulder. • All hose is flaked out (2 points)		
4	Hold on to nozzle and call for water. • Water is received at nozzle (2 points)		
ASSESSMENT TOTAL		**8 points possible**	

FS1-10.11 Methods of Fire Attack: Direct, Indirect, Combination

Students will demonstrate proficiencies required for applying three types of water application for fire attack: direct, indirect, and combination.

Overview

- The student will take an attack line and demonstrate each type of water application. Each type requires a step by step process to achieve the different methods of fire attack.
- This is an intermediate assessment. It is a structured task that requires two or three specified baseline skills
- Assessment takes place during the course.
- Students should be provided with the scorecard (next pages) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

Equipment & Materials

- 1 ¾" or 2 ½" hoseline
- Smooth Bore Nozzle or Combination Nozzle
- Fire Engine
- Prop to simulate burning solid fuel (direct method)
- Prop to simulate concealed space with small opening where no life hazard is present (indirect method)
- Prop to simulate space with floor, walls, ceiling (combination method)

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
10.11 Methods of Fire Attack: direct, indirect, combination	20 points	18-19 points	14-17 points	< 14 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will:

- Confirm that the needed equipment and materials are ready for the student's use at the assessment site.

- Inform/remind the student the location of the Prop to simulate burning solid fuel (direct method)
- Inform/remind the student the location of the Prop to simulate concealed space with small opening where no life hazard is present (indirect method)
- Inform/remind the student the location of the Prop to simulate space with floor, walls, ceiling (combination method)
- Inform/remind the student the location of the small opening into a concealed space where no life hazard is present.
- Tell the student to begin. Observe the student's performance. Record the appropriate score and any comments for each step.

Table 21. Criteria Scorecard: Fire Attack Method: Direct

Criteria Scorecard: Fire Attack Method: Direct		2 points each	Comments
1	Open the Smooth Bore or Combination Nozzle seton straight stream (turned to the right) slowly by pulling handle back towards you. • Student opens the smooth bore nozzle or combination nozzle set on straight stream (turned to the right) and slowly pulls the handle back toward them (2 points) • Student opens the smooth bore or combination nozzle set on straight stream (turned to the right) and does not pull the handle back slowly (1 point).		
2	Applies a solid stream directly on the burning solid fuels or simulation of burning solid fuels (2 points)		
3	Shut Smooth Bore Nozzle or Combination down slowly by pushing handle away from you • Correctly shuts smooth bore nozzle down slowly by pushing handle away from them (2 points) • Shuts smooth bore or combination nozzle down but pushes handle down fast (1 point)		
ASSESSMENT TOTAL		**6 POINTS POSSIBLE**	

Table 22. Criteria Scorecard: Fire Attack Method: Indirect

Criteria Scorecard: Fire Attack Method: Indirect		2 points each	Comments
1	Open the Combination Nozzle (turned slightly to the left) slowly by pulling handle back towards you.		

Criteria Scorecard: Fire Attack Method: Indirect		2 points each	Comments
	• Student opens the combination nozzle (turned slightly to the left) slowly by pulling handle back toward them (2 points) • Student open the combination nozzle (turned slightly to the left) by pulling the handle back fast (1 point)		
2	Applies stream through small opening into a concealed space where no life hazard is present for1 minute (2 points).		
3	• Shuts combination nozzle down slowly by pushing handle away from them (2 points) • Shut combination nozzle down by pushing handle away fast (rather than slowly) (1 point)		
4	Cover opening with a fog pattern of water to allowthe water to be converted into steam (2 points)		
ASSESSMENT TOTAL		**8 POINTS POSSIBLE**	

Table 23. Criteria Scorecard: Fire Attack Method: Combination

Criteria Scorecard: Fire Attack Method: Combination		2 points each	Comments
1	Open the Smooth Bore Nozzle or Combination Nozzle set on straight stream (turned to the right) slowly by pulling handle back towards you. • Student opens the smooth bore nozzle or combination nozzle and set on straight stream (turned to the right) slowly by pulling handle back toward them (2 points) • Student opens the smooth bore nozzle or combination nozzle and set on straight stream (turned to the right) by pulling the handle back toward them fast (0 points)		
2	Rotate stream in a clockwise manner hitting the ceiling, walls, and floor. • Rotates stream in a clockwise manner hitting the ceiling, walls, and floor (2 points)		

Criteria Scorecard: Fire Attack Method: Combination		2 points each	Comments
	• If direction is not clockwise or if any one portion (ceiling, walls, or floor) is not hit correctly (1 point) • Incorrect direction and/or more than one portion incorrect (0 points)		
3	Shut Smooth Bore or Combination Nozzle down slowly by pushing handle away from you • Student shuts smooth bore or combination nozzle down slowly by pushing handle away from them (2 points) • Student shuts smooth bore or combination nozzle down by pushing handle away fast (1 point)		
ASSESSMENT TOTAL		**6 POINTS POSSIBLE**	

Score Summary	
Fire Attack Type	**Possible Points**
Direct	6
Indirect	8
Combination	6
TOTAL	**20**

FS1-10.14 Opening and Closing a Nozzle

Students will demonstrate abilities to properly open and close a nozzle, using a charged attack line.

Overview

- Performance assessment in which an individual student demonstrates abilities to properly open and close a nozzle, using a charged attack line.
- Baseline assessment that focuses on a specific, individual skill.
- Assessment takes place during the course.
- Students should be provided with the scorecard (next page) in advance, with corresponding instruction and opportunity for practice using the same equipment they will use for the assessment.

Equipment & Materials

- Smooth Bore or Combination Nozzle
- 1¾”, 2½”, and/or 3” hoselines

- Fire Engine

Task Assessment Growth Levels				
	Proficient 100%	**Developing 90-99%**	**Marginal 70-89%**	**Unsatisfactory < 70%**
FS1-10.14 Opening and closing a nozzle	6 points	5 points	4 points	< 4 points

Assessment Instructions

To begin the assessment, the instructor/assessment administrator will:

- Confirm that the needed equipment and materials are ready for the student's use at the assessment site.
- Tell the student to begin. Observe the student's performance. Record the appropriate score and any comments for each step.

Table 24. Criteria Scorecard: Opening and closing a nozzle

Criteria Scorecard: Opening and closing a nozzle		**2 points each**	**Comments**
1	Holds the nozzle so that the bale is at arm's length while maintaining a solid stance (2 points)		
2	• Opens the water supply by pulling the bale toward them slowly (2 points) • Opens the water supply by pulling the bale toward them fast (1 point)		
3	• Turns off the nozzle by pushing forward on the bale. When shutting down the nozzle, does so slowly to prevent water hammer (2 points) • Turns off the nozzle by pushing forward on the bale fast (1 point)		
ASSESSMENT TOTAL		**6 POINTS POSSIBLE**	

Evaluator Name _____

Evaluator Title _____

Evaluator Signature_____Date _____

SCSD CTE Student Portfolio

Definition: Student portfolios are a collection of personal documents, which showcase an individual's learning experiences, goals and achievements. Student portfolios are created and controlled by the student, facilitated by the instructor, and evaluated by outside entities.

Purpose: Students should be able to leave a program with as many tools in their toolbox as possible. Student portfolios are a way to assist students in marketing themselves in future interviews, by using the portfolio to illustrate his or her skills and/or talents.

SCSD CTE Student Portfolio Requirements

☐	**Table of Contents:**	This should list each section and piece of the portfolio in the order it appears
☐	**Cover letter**	A cover letter introducing the student to a potential employer about a specific job in his or her chosen pathway. Should focus on why the student is the best candidate for the job. It should compliment the resume, not repeat it.
☐	**Resume**	Should be professionally formatted. Usually a one-page document listing the student's name, personal information (address, phone, and email), an objective, work history or extracurricular/community involvement, education, certifications/credentials, personal skills/interests, and references.
☐	**Letters of Recommendation**	Students must include at least two (2) reference letters, provided by people outside the school who are familiar with his or her work or character. The reference letters can be employment-related, personal, or they can attest to the character of the student.
☐	**Certifications/Credentials**	Students should include copies of any credentials and/or certifications they have earned as a result of their program.
☐	**Transcript**	Student provides a copy of his or her full academic transcript.
☐	**Employability Profile**	Per NYSED: The work skills employability profile is intended to document student attainment of technical knowledge and work-related skills. Documents to validate skills reported on the profile could include, but are not limited to, an employer/teacher review of student work based on learning standards and expectations in the workplace, performance evaluations and observations. Students must have at least one employability profile completed within one year prior to school exit. If a student is involved in a number of work-based learning experiences and/or is employed part time, he/she may also have additional employability profiles as completed by others knowledgeable about his or her skills (e.g.,

		employer and/or job coach).
☐	**College Research**	A written research assignment focusing on three colleges offering programs in the student's chosen career pathway.
☐	**Career Plan**	Per NYSED: "Career Plans are an important mechanism to add relevance and meaning to learning experiences across subject areas. The career development model used to create the Career Plan aligns with the CDOS standards." A Career Plan document can be found here: http://www.p12.nysed.gov/cte/careerplan/docs/SecondaryCommencLvl.pdf
☐	**Student Awards**	This section is completely open ended. Students should use this section to illustrate any awards, projects, exemplars, service learning, or scholarships, they participated or earned during their high school years. They can show evidence through pictures, project documentation, news articles, program agendas, meeting minutes, videos, etc.
☐	**Work Samples**	Examples highlighting ***only the student's best work***, demonstrating the skills and competencies he or she has mastered. These should be presented professionally and be clearly captioned. ***Should not be thought as a scrapbook.*** Potential employers are only interested in the very best examples.

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D. Postsecondary Articulation

> *The self-study team reviews the postsecondary articulation agreement for the program seeking approval. Postsecondary articulation agreements help students prepare for the transition from high school to advanced study in a particular career area. Articulation agreements provide direct benefits to students such as dual credits, college credits, advanced standing, or reduced tuition at a postsecondary institution. Articulation agreements may include several school districts and/or BOCES and multiple postsecondary institutions. The school district or BOCES may enter into multiple articulation agreements for a program seeking approval.*

Process

- Reviewers confirm that the postsecondary articulation agreement is designed to prepare students for the transition from high school study to postsecondary study in the career area of the program seeking approval.
- Reviewers confirm that a postsecondary articulation agreement has been obtained that offers direct benefits to students in the program seeking approval.
- Reviewers confirm that the postsecondary articulation agreement includes the
    - prerequisite skills, knowledge, or coursework required of students to participate in the agreement
    - roles and responsibilities of each institution
    - duration of the agreement
    - endorsement by officials of each institution
- Signed articulation agreements must be on file within the school district or BOCES.

Documentation

Documentation of the postsecondary articulation agreement is maintained by the school district or BOCES and updated whenever modifications are made. Recommendations on the technical assessment selection should be included in the self-study report and reviewed by the external committee. A copy of the signed postsecondary articulation agreement must be attached to the Application for Career and Technical Education Program Approval.

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

Articulation Agreement
between
Syracuse City School District (SCSD)
725 Harrison St, Syracuse, NY
and
Onondaga Community College
4585 West Seneca Turnpike, Syracuse, NY

The signatories of this articulation agreement, Syracuse City School District (SCSD) and Onondaga Community College (OCC), declare their intention to participate in a partnership for the purpose of delivering educational instruction to eligible students. The parties to this agreement have reached the following understanding:

1. **Term**
   The term of this agreement shall be for four years from July 1, 2022-June 30, 2026 and subject to the following conditions:

   - Both parties have the option to extend this Agreement for one (1) additional four year period giving written notice to the College no later than ninety (90) days prior to the expiration date.

2. **Modification and Waiver**
   No waiver or modifications shall be valid unless it is in writing and signed by OCC and SCSD.

3. **Curriculum and Courses**
   - Students who have enrolled in the Fire/Rescue program at Syracuse City School District will be eligible to enroll in courses and earn credit for:
     - ENG 103 and ENG 104: Freshman Composition and Literature I and II, subject to an annual Memorandum of Understanding and the identification of an OCC faculty member to teach the course on-premises at the Public Service Leadership Academy at Fowler High School.
   - ENG 103 and ENG 104 are required for the Fire Protection Technology, A.A.S. degree at OCC. ENG 103 is required for the Fire Protection Technology certificate at OCC.
   - Tuition will be incurred according to all applicable requirements in place by the State University of New York. For courses taught by Onondaga Community College faculty, the Syracuse City School District will additionally incur the cost set by annual Memorandum of Understanding between SCSD and OCC.
   - Students will be assisted in the course registration process by OCC. Students will also be supported in the admission process to Onondaga Community College through a specialized workshop and the Office of Student Recruitment.

4. **Students**
   Each student must enroll and remit payment as required by SUNY for the course(s) with OCC through the registration process as directed by the Director of Concurrent Enrollment and Secondary School Programs.

5. **Entire Agreement**
This Agreement Constitutes the entire Agreement between the College and SCSD with respect to the subject matter hereof. This Agreement supersedes any and all other agreements, whether oral or in writing, between parties with respect to the subject matter hereof.

Casey Crabill, Ed.D. President Onondaga Community College	Jaime Alicea Superintendent Syracuse City School District
4/12/22 Date	4/18/22 Date

SUNY BROOME

Division of Business and Professional Studies
P.O. Box 1017 • Binghamton, New York 13902
Voice: (607) 778-5008 • Fax: (607) 778-5170

Articulation Agreement

Between

SUNY Broome Community C:ollege, Criminal Justice & Emergency Services Department, PO Box 1017, Binghamton, New York 13902

And

Syracuse City School District, 725 Harrison Street, Syracuse, NY 13204

- Articulation agreements are intended to facilitate the progress of students by recognizing the common curriculum elements among the Career and Technical Education partners.
- Articulation agreements should be developed between high school and college faculty for each specific curriculum area. Each agreement will be separate, designated to meet the needs of students as they progress through high school/college degree requirements.
- Faculty and administrators at your school should review the articulation agreement, obtain the signatures required, and return the completed form to the appropriate Department Chair at the College.
- The Chairperson at SUNY Broome Community College will obtain the appropriate signatures at the college, and a copy of the complete contract will.be returned to you.
- This agreement shall automatically renew each year unless a modification or cancellation is requested in writing by either SUNY Broome Community College or Syracuse City School District.
- Copies of the Articulation agreement should be filed with the Secondary School Department Office, SUNY Broome Community College Program Office, and the SCSD Career and Technical Education Office.

SUNY Broome Community College Course(s) Articulated:

FRS 103	**Fire Prevention & Protection**	**3 credits**
Course Number	**Title**	SUNY Broome Credits
FRS 105	**Fire Investigation**	**3 credits**
Course Number	Title	SUNY Broome Credits
HLS 150	**Emergency Management**	**3 credits**
Course Number	Title	SUNY Broome Credits
***FRS 999**	**Fire Elective**	**3 credits****
Course Number	Title	SUNY Broome Credits

Secondary Course(s) to be Certified:

FRP 100	**Fire Rescue Pathway 200**	**1 Credits**
Title		High School Credits
FRP 200	**Fire Rescue Pathway 300**	**1 Credits**
Title		High School Credits
FRP 300	**Fire Rescue Pathway 400**	**1 Credits**
Title		High School Credits
****Precision Exam - with score of 80% or higher**		**N/A**
Title		High School Credits

SUNY BROOME

Division of Business and Professional Studies
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*** This applies only to Fire Protection Technology majors only- this does not apply to Homeland Security majors.**

SUNY Broome Community College agrees to:

1. Set up procedures at SUNY Broome Community College to accommodate students from the participating secondary schools who earn articulated credit.
2. Establish opportunities for students who are enrolled in the articulated course(s) to meet program faculty and advisors prior to their first semester at SUNY Broome Community College.
3. Maintain follow-up files and closely monitor the academic progress of students in articulated programs.
4. Set up procedures to ensure that the articulated credit is posted on the student's college record. at the appropriate time with the SUNY Broome Community College course number and name, the credits earned, and the notation "Proficiency credit granted."
5. Notify participating secondary school of any curriculum changes to articulated course that will affect the agreement.

Secondary School agrees to:

1. Communicate the details of the articulation agreements to the high school principals, teaching staff, guidance personnel, students and parents.
2. Develop procedures for certifying that each student has satisfied the requirements for receiving articulated credit.
3. Develop methods for publicizing the articulation agreement in order to encourage students to take advantage of this opportunity.
4. Notify SUNY Broome Community College of any curriculum changes to the certified course that will affect the agreement.
5. Notify students they are responsible for contacting SUNY Broome Criminal Justice and Emergency Services Department Chair, after their official high school transcripts denoting SCSD courses have been received, to request a transfer credit evaluation.

Guidelines for awarding articulated credit:

1. The student must have completed the course(s) specified by this agreement with a grade of "B" or better, or 80% or better.
2. The student must meet the performance outcomes and competencies specified in the course outlines.
3. The student understands that if he/she is unable to make satisfactory progress in an advanced course in the area for which articulated credit is awarded, he/she may, at the discretion of the faculty, be required to complete a lower level course.
4. This articulation is for graduates of the Syracuse City School District Fire and Rescue program who are admitted into the A.A.S Fire Protection Technology (FS) or A.S. Homeland Security (HMSC) program at SUNY Broome Community College.

SUNY BROOME
Division of Business and Professional Studies
P.O. Box 1017 • Binghamton, New York 13902
Voice: (607) 778-5008 • Fax: (607) 778-5170

Signatures

SUNY Broome Community College:

4/9/18
Chairperson, Criminal Justice & Emergency Services — Date

4/11/18
Associate VP & Dean, Business & Public Services Division — Date

4-16-18
Executive Vice President & Chief Academic Officer — Date

Secondary School:

3/28/18
Superintendent, Syracuse City School District — Date

3/28/18
Assistant Superintendent for CTE and High Schools — Date

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E. Work-based Learning

> *Work-based learning (WBL) is the "umbrella" term used to identify activities which collaboratively engage employers and schools in providing structured learning experiences for students. These experiences focus on assisting students to develop broad, transferable skills for postsecondary education and the workplace. A quality WBL experience can make school-based learning more relevant by providing students with the opportunity to apply knowledge and skills learned in the classroom to real world situations.*
>
> *Time requirements that students in an approved program may devote to work-based learning experiences are set by administrators of the approved program. This time should be an outcome of the self-study report and external review phases of the approval process. Work-based learning experiences must be sufficient in length and rigor to contribute to student achievement of the State learning standards as well as specific technical competencies.*

Process

- The school district/BOCES and the employer cooperatively plan all work experiences.
- The school district/BOCES set up a formal procedure for the supervision/coordination of all work-based learning experiences and must ensure that work-based learning coordinators are appropriately certified.
- The school district/BOCES provide work-based learning experiences for students with disabilities
- The school district/BOCES and employer must ensure compliance with federal and state labor laws, and the State Department of Labor regulations and guidelines.
- The school district/BOCES must explore and develop work-based learning experiences in settings that are relevant to the program.
- The school district/BOCES must comply with Commissioner's Regulations and Department policy where credit towards graduation is being awarded.

Documentation

Recommendations for work-based learning should be included in the self-study report and reviewed by the external committee.

Resources

New York State Education Department Work Experience Manual **http://www.emsc.nysed.gov/cte/wbl/**

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

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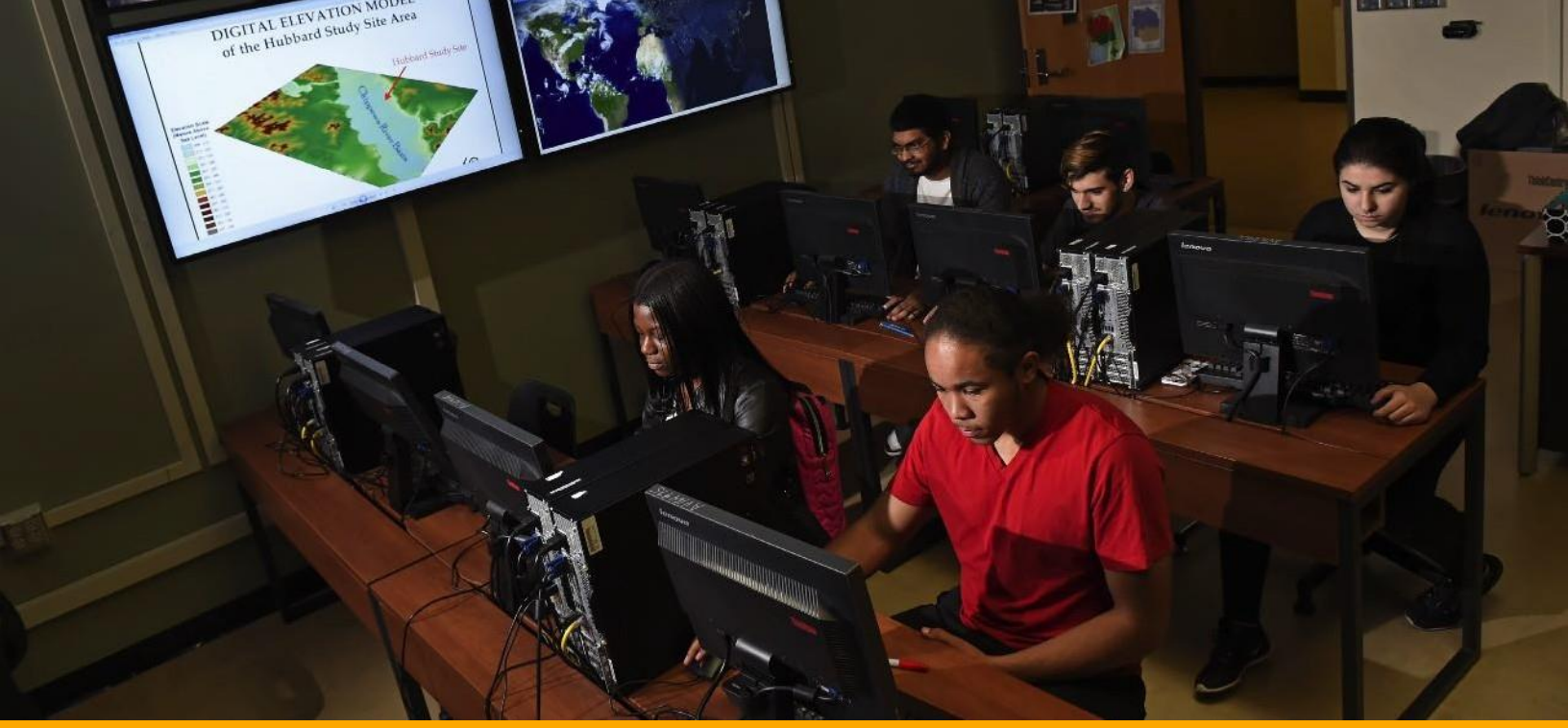


SYRACUSE CITY SCHOOL DISTRICT

Career and Technical Education

CTE

Internship Handbook

Preparing today's students for tomorrow's careers.

Table of Contents

Syracuse City School District

Career and Technical Education Internship

Forms are available on SCSD CTE website www.syracusecityschools.com/cte

Introduction

Syracuse City School District Career and Technical Education Work Based Learning

Learning in the workplace is not a new concept. Informal, on-the-job training is an integral part of all workforce development. Work based learning (WBL) provides structured learning experiences for students through exposure to a range of occupations. The Harvard Universityreport, Pathways to Prosperity (February, 2011) suggested that "Work-linked learning should play an especially important role in the new American system of pathways
to prosperity. There is mounting evidence that this would be an effective strategy for encouraging young adults to complete both high school and post-secondary degrees. Co-operative education is a tested model that provides students with extensive work experience that is monitoredby the school."

Learning in the workplace is connected to and supports learning in the classroom. Work based learning also helps students achieve established academic standards. Properly developed and supported, work based learning provides a practical context for school subject matter and enhances thetraditional classroom learning. Work based learning activitiespromote the development of broad, transferable skills and are a key element of a rigorous and relevant education for students. It enables students to acquire the attitudes, skills and knowledge needed to succeed in today's workplace.

Employer partners can develop and support work based learning experiences that promote the attainment of workplace knowledge and skills. In doing so, they can support academic achievement and personal growth by designing, structuring, supporting and connecting work based learning experiences. Work based learning also supports professional, technical, and work-readiness skillsdevelopment. Quality work based learning should:

- Be designed to enhance the learning of skills and workplace knowledge in all aspects of the industry
- Be structured to be safe, legal and measurable
- Be developmentally appropriate
- Have identified learning objectives and assessstudent performance
- Develop career ready practices and provideopportunities for reflection
- Be supported and documented by appropriateplanning and training; and
- Comply with State and Federal labor laws

Syracuse City School District Career and Technical Education Internship

A Career and Technical Education Internship provides an important link between the classroom and the workplace for students age 16 and older. It is a structured, time- limited, career preparation activity in which students are assigned to a workplace for a defined period of time to participate in and observe firsthand within a given industry.The internship enhances and adds relevance to classroom learning. The internship may provide the opportunity to work in teams, rotate through a number of departments and job functions, or work on a project of interest to the student. It is essentially a partnership that links school, community, and business/industry to provide a real-world environment in which students are given the opportunity
to apply, and thereby enhance, the knowledge and skills obtained in the classroom. The internship is related to the student's CTE program of study, with the primary goals ofpromoting:

- The exploration of and experience in a field ofinterest
- Exposure to a wide range of careers and jobs within anindustry
- Opportunities to develop, practice and demonstratenew skills
- The acquisition of occupational knowledge and awareness of the skills and education needed to besuccessful in the industry

CTE Teacher

Career & Technical Program/Teacher Guidelines

Legal Requirements of SCSD CTE Internship Program

All Career and Technical Education Internship Programshave the common objective of providing opportunities for students to develop and demonstrate job skills at a supervised worksite. They are supported by training plans developed cooperatively by the employer, instructor, and student. There should be ongoing communication between the job mentors and the CTE teacher or work based learning coordinator concerning students' performance andneeds.

Each internship program needs to have the following:

- New York State Education Department (NYSED)approval of the CTE program
- The employer understands that the student placement is governed by NYSED, New York State Workers' Compensation Board (NYSWCB), New York State Department of Labor (NYSDOL), and United States Department of Labor (USDOL) laborlaws and regulations
- Employer is provided a Certificate of Insurance fromschool where school liability insurance protects the employer from any damage student may do in the workplace
- Students are given written notification that this program is unpaid and they are not due any wages perNYSDOL regulations
- Per NYS, students are required to receive coverage under the employer's Workers' Compensation Insurance if student is interning for a for-profit company. If student is interning at a non-profit entity,the student is required to be covered by the employer'svisitors or volunteer insurance.
- Worksite must be in compliance with OccupationalSafety and Health Administration (OSHA) regulations. Health and safety instruction/trainingappropriate for the job is provided by the SCSD and employer specific training is provided by the employer on the worksite.
- Memorandum of Agreement is in effect between the cooperating business and the education agency and outlines the responsibilities of the student, employer, parent/guardian, and school/coordinator, all of whom must sign to confirm their support of the agreement.
- Students complete an Internship Application indicating their understanding of, and agreement to,all rules and regulations of the program.
- Students receive instruction embedded within their CTE curriculum relating to the technical and career ready practices.
- An Internship Training Plan (ITP) is developed and used for each participating student. The plan identifiesthe general and specific job tasks the student will perform on the job, the desired learning outcomes of the experience, and the time frame the student will spend at each task. The training plan should be designed to ensure that the student will have a progressive learning experience.
- All participating students are meeting, or have met, academic requirements of their CTE programs and academic subjects. No students on academic probationwill participate in the internship.
- Employment Certificate (Working Papers) for students provide verification that a student under age18 is eligible for employment. The student, employer,and school must complete the form. Employment certificates are obtained at the high school – typicallythe main office, health office, or guidance office.
- Time Log/Record of Attendance provides an official record of the weekly and cumulative hours the student has worked during the experience. It must bemaintained for each student.
- An intern evaluation will be done by the CTE teacher before the internship, at the midpoint of the internshipand at the end of the internship. This same form will be completed by the on-site supervisor in the midpointand at the end of the internship.

SCSD CTE Internship Program Checklist
(To be completed by CTE teacher or WBL coordinator)

- ☐ NYSED has approved the CTE program
- ☐ The employer understands that the student placement is governed by NYSED, NYSWCB, NYSDOL, and USDOL labor laws and regulations
- ☐ NYSED Application for Employment certificate (working papers, usually available in school counseling office) has been verified (NYSED form attached)
- ☐ Employer is provided with a Certificate of Insurance from school to cover liability (sample attached)
- ☐ A written Memorandum of Agreement is in effect between the cooperating business and the education agency (**Form #1**)
- ☐ Students complete an Internship Application indicating their understanding of, and adherence to all rules and regulations set forth by the program. (**Form #2**)
- ☐ Students receive instruction embedded within their CTE curriculum relating to the technical and Career Ready Practices. The CTE teacher and the student have completed the SCSD CTE Internship Ready to Work Assessment (**Form #3**)
- ☐ An Internship Training Plan (ITP) is developed and used for each participating student (**Form #4**)
- ☐ Students are given written notification that this program will be unpaid and they are not due any wages per NYS DOL regulations (**Form #5**)
- ☐ All SCSD internship candidates have received appropriate safety certification for the industry provided by the school before internship and employer specific training and orientation is provided by the employer on the worksite (**Form #6 & Form #7**)
- ☐ All participating students are meeting, or have met, academic requirements of their CTE programs and academic subjects
- ☐ Review Time Log/Record of Attendance which serves as an official record of the hours the student has worked during the experience (**Form #8**)

REQUIRED FORMS

NYSED Application for Employment Certificate

Certificate of Insurance

SCSD Memorandum of Agreement (Form #1)

SCSD Internship Program Application (Form #2)

SCSD Internship Ready to Work Assessment (Form #3)

SCSD Internship Training Plan (Form #4)

SCSD Notification of unpaid internship (Form #5)

SCSD Internship Safety Certification (Form #6)

SCSD Worksite Orientation (Form #7)

SCSD Weekly Time Log/Record of Attendance (Form #8)

Forms are available online at the SCSD CTE website : www.syracusecityschools.com/cte

CTE Teacher/WBL Coordinator

Date

Employer Internship Partner Guidelines

SCSD CTE Internship Employer Requirements

Safety

At all times, both school personnel and the employment site personnel must take appropriate steps to ensure thatsafe practices are stressed and followed. However, it is impossible to guarantee that no injuries resulting in medicalexpenses and liability will occur. The following prudent steps are encouraged:

1. In-school course content must include training related to safety at the worksite. Appropriate safety certification should be offered if possible. SCSD internship candidates will have received appropriatesafety training before beginning their internship.
2. Any sites used for SCSD CTE internships will bereviewed by school personnel prior to placing a student at the worksite.
3. Employers must provide safety training information to interns as they would a new employee. Safety training must be provided if the employer engaged in a particularly hazardous occupation for minors asdefined by the USDOL.
4. Provisions for student safety must be included as partof the training agreement signed by the employer, student, parent, and school representative.

Types of Liability Insurance and Risk Management

Workers' Compensation and Employer Liability Insurance

All employers will have a policy that provides coverage for the Workers' Compensation statutory benefits as well as liability coverage for certain employment-related situations.Verification of employer's Workers Compensation insurance will be included in the Memorandum of Agreement. The SCSD will also have insurance that covers the student participating in a school-related internship experience.

SCSD CTE Internship Expectations & Responsibilities ofEmployer

Before

- Determine projects or activities that would beappropriate for your student intern
- Communicate with staff that an intern will be at theworkplace and identify mentors
- Designate one employee, the on-site supervisor, to work with coordinator/teacher to develop and definesuccessful student objectives and experiences and record on the student Internship Training Plan

During

- Provide student with a Work Site Orientation toorganization and any required training
- Train student intern for your work site, including allwork site safety training
- Maintain a quality, safe and legal learning experience;provide effective supervision
- Use the Internship Training Plan as a guide for the internship; hold intern to employee standards/ expectations; oversee, direct, and provide adequate tasking to maximize learning
- Meet with coordinator/teacher and student to decideon an ongoing communications strategy
- Evaluate intern work and provide constructivecriticism
- Assist student in working toward learning outcomes
- Coordinate student schedule, approve weeklytimesheets
- Communicate successes and opportunities at the workplace that the teacher can use to enhance the value of classroom connections
- Complete a student evaluation midway throughinternship and discuss with student

After

- Complete a final evaluation of the student
- Hold debriefing session and review performance withthe student and teacher
- Complete a Program Evaluation

Employer Internship Partner

SCSD CTE Internship Employer Internship Partner Checklist (To be completed by On-Site Supervisor/Mentor)

- ☐ Meet with coordinator/teacher and student to agree on ongoing communication strategy (e-mail, text, telephone, etc.)
- ☐ A written Memorandum of Agreement is in effect between the cooperating business and the education agency (**Form #1**)
- ☐ Work with coordinator/teacher to develop and define successful student objectives and experiences and record on the student Internship Training Plan (**Form #4**)
- ☐ Coordinate student schedule, approve weekly time log/record of attendance (**Form #8**)
- ☐ Communicate with staff that an intern will be at the workplace and identify on-site supervisor and/or mentor

  On-Site Supervisor _____

  Mentor Name _____
- ☐ Provide student with Work Site Orientation to organization and any required training (Form #7)
- ☐ Create and maintain a quality, safe and legal learning experience
- ☐ Hold intern to employee standards/expectation; provide student support and candid feedback
- ☐ Communicate successes and opportunities at the workplace that the teacher can use to enhance the value of classroom connections
- ☐ Complete an interim SCSD CTE Internship Ready to Work Assessment of student performance and discuss with student (**Form #3**)
- ☐ Provide effective supervision
- ☐ Complete a final assessment of the student (**Ready to Work Assessment, Form #3 and Student Training Plan, Form #4**)
- ☐ Complete a program evaluation (**Form #10**)

REQUIRED FORMS

SCSD Memorandum of Agreement (Form #1)

SCSD Internship Ready to Work Assessment (Form #3)

SCSD Internship Training Plan (Form #4)

SCSD Worksite Orientation (Form #7)

SCSD Weekly Time Log/Record of Attendance (Form #8)

SCSD Mentor Program Evaluation (Form #10)

Forms are available online at the SCSD CTE website : www.syracusecityschools.com/cte

_____ _____

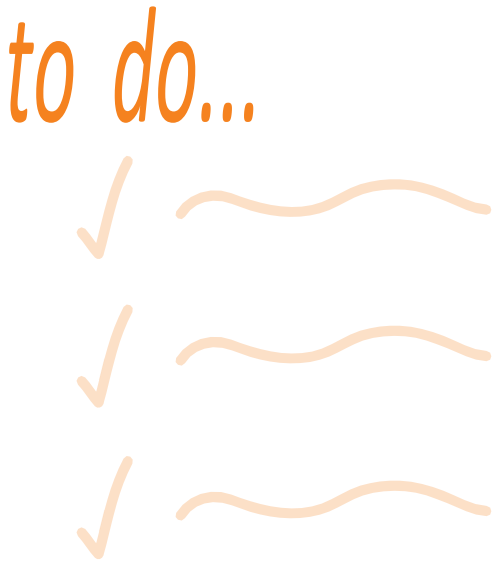
Employer/ Mentor Date

Student Intern Guidelines

Expectations and Responsibilities of Students

Before

- Obtain working papers (if under 18)
- Return Internship Application and all permissionslips with appropriate signatures
- Meet with your teacher/coordinator and worksite supervisor to finalize an Internship Training Plan



During

- Attend Orientation at the worksite
- Observe all workplace rules and regulations particularly those applicable to safety and securityconcerns
- Perform all duties, jobs and assigned tasks; treatinternship like a real job
- Maintain regular work schedule and notify supervisor in advance of any vacation/appointments
- Track you hours as instructed on Weekly Timesheet
- Develop skill specific learning outcomes with yourworksite supervisor
- Participate in ongoing reflection journal activitiesand skill building classroom assignments
- Communicate with your teacher/coordinator andworksite supervisor if issues arise
- Keep copies of all necessary paperwork (work journal, training plan, Weekly Time Log/Record ofAttendance, and evaluations)

After

- Participate in self-evaluation and reflection activities
- Update your resume based upon new skills andexperiences gained
- Send thank you note to employer

Student Intern

SCSD CTE Internship Student Checklist (To be completed by student)

- ☐ Obtain NYSED Application for Employment Certificate (usuallyavailable in school counseling office, application attached)
- ☐ A written Memorandum of Agreement is in effect between thecooperating business, the education agency, and signed by student and parents (**Form #1**)
- ☐ Return Internship Application (**Form #2**) and all permission slipswith appropriate signatures
- ☐ Develop skill specific learning outcomes with your worksitesupervisor
- ☐ Meet with your teacher/coordinator and worksite supervisor tofinalize an Internship Training Plan for the internship (**Form #4**)
- ☐ Attend orientation at the worksite (**Form #7**)
- ☐ Observe all workplace rules and regulations particularly thoseapplicable to safety and security concerns
- ☐ Perform all duties, jobs and assigned tasks; treat internship like areal job
- ☐ Maintain regular work schedule and notify supervisor in advanceof any vacation/appointments
- ☐ Track you hours as instructed on time log/record of attendance(**Form #8**)
- ☐ Participate in ongoing reflection activities and skill buildingclassroom assignments
- ☐ Communicate with your teacher/coordinator and worksite supervisor, if issues arise and keep copies of all necessary paperwork (work journal, training plan, Weekly Time Log/Recordof Attendance, and evaluations)
- ☐ Participate in self-evaluation and reflection activities (**Forms #3 & #9**)
- ☐ Update your resume based on new skills and experiences gained
- ☐ Send thank you note to employer

REQUIRED FORMS

SCSD Memorandum of Agreement
(Form #1)

SCSD Internship Program Application
(Form #2)

SCSD Internship Ready to Work Assessment
(Form #3)

SCSD Internship Training Plan
(Form #4)

SCSD Worksite Orientation
(Form #7)

SCSD Weekly Time Log/Record of Attendance
(Form #8)

SCSD Student Evaluation
(Form #9)

Forms are available online at the SCSD CTE website : www.syracusecityschools.com/cte

Student _____ Date _____

SCSD CTE Internship Forms

NYSED Application for Employment Certificate

SCSD Certificate of Insurance to Cover Student Liability

(Sample) Form #1 SCSD Memorandum of Agreement

Form #2 SCSD Internship Program Application

Form #3 SCSD Internship Ready to Work Assessment

Form #4 SCSD Internship Training Plan

Form #5 SCSD Notification of unpaid internship

Form #6 SCSD Internship Safety Certification

Form #7 SCSD Worksite Orientation

Form #8 SCSD Weekly Time Log/Record of Attendance

Form #9 SCSD Student Evaluation

Form #10 SCSD Mentor Program Evaluation

Forms are available on SCSD CTE website at www.syracusecityschools.com/cte

AT-17
Rev. 5/10

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
ALBANY, NY 12234

APPLICATION FOR EMPLOYMENT CERTIFICATE

See reverse side of this form for information concerning employment of minors.

All signatures must be handwritten in ink, and applicant must appear in person before the certifying official.

THIS APPLICATION DOES NOT AUTHORIZE EMPLOYMENT

PART I – Parental Consent – (To be completed by applicant and parent or guardian)

Parent or guardian must appear at the school or issuing center to sign the application for the first certificate for full-time employment, unless the minor is a graduate of a four-year high school and presents evidence thereof. For all other certificates, the parent or guardian must sign the application, but need not appear in person to do so.

Date……

I, …… Age ……..…
[Applicant]

Home Address ……....., apply for a certificate as checked below
[Full Home Address including Zip Code]

- ☐ Nonfactory Employment Certificate – Valid for lawful employment of a minor 14 or 15 years of age enrolled in day school when attendance is not required.
- ☐ Student General Employment Certificate – Valid for lawful employment of a minor 16 or 17 years of age enrolled in day school when attendance is not required.
- ☐ Full-Time Employment Certificate – Valid for lawful employment of a minor 16 or 17 years of age who is not attending day school.

I hereby consent to the required examination and employment certification as indicated above.

……
[Signature of Parent or Guardian]

PART II – Evidence of Age – (To be completed by issuing official only)

……. – Check evidence of age accepted – Document # (if any) ……..
[Date of Birth]

Birth Certificate State Issued Photo I.D Driver's License Schooling Record Other……
[Specify]

PART III – Certificate of Physical Fitness

Applicant shall present documentation of physical exam from a school or private physician, physician's assistant or nurse practitioner licensed to practice within New York State. Said examination must have been given within 12 months prior to issuance of the employment certificate. Date of physical exam on file with school …… If physical exam is over 12 months, provide student with certificate of physical fitness to be completed by school medical director or private health care provider.

If the physical exam or Certificate of Physical Fitness is limited with regards to allowed work/activity, the issuing official shall issue a Limited Employment Certificate (valid for a period not to exceed 6 months unless the limitation noted by the physician is permanent, then the certificate will remain valid until the minor changes jobs. Enter the limitation on the employment certificate. THE PHYSICIAN'S CERTIFICATION SHOULD BE RETURNED TO THE APPLICANT.

PART IV – Pledge of Employment – (To be completed by prospective employer)

Part IV must be completed only for: (a) a minor with a medical limitation; and (b) for a minor 16 years of age or legally able to withdraw from school, according to Section 3205 of the Education Law, and must show proof of having a job.

The undersigned will employ …… residing at ……
[Applicant]

as …… at ……
[Description of Applicant's Work] [Job Location]

for …… days per week …….. hours per day, beginning …… a.m. ……..…… p.m.

…… Factory ending…… a.m. ……p.m.
[Name of Firm]

Nonfactory ……..
[Address of Firm]

…… Starting date …….. ……..
[Telephone Number] [Signature of Employer]

PART V – Schooling Record – (To be completed by school official)

Part V must be completed only for a minor 16 years of age who is leaving school and resides in a district (New York City and Buffalo) which require a minor 16 years of age to attend school, according to Section 3205 of the Education Law.

I certify that the records of …… ……
[Name of School] [Address]

Show that …….. whose date of birth is ……
[Name of Applicant]

Is in grade…… ……
[Signature of Principal or Designee]

PART VI – Employment Certification – (To be completed by issuing official only)

Certificate Number ……..... Date Issued ……

…… …….. ……
[School or Issuing Center] [Address] [Signature of Issuing Officer]

GENERAL INFORMATION

An employment Certificate (Student Nonfactory, Student General, or Full Time) may be used for an unlimited number of successive job placements in lawful employment permitted by the particular type of certificate.

A Nonfactory Employment Certificate is valid for 2 years from the date of issuance or until the student turns 16 years old, with the exception of a Limited Employment Certificate. A Limited Employment Certificate is valid for a maximum of 6 months unless the limitation noted by the physician is permanent, then the certificate will remain valid until the minor changes job. It may be accepted only by the employer indicated on the certificate.

A new Certificate of Physical Fitness is required when applying for a different type of employment certificate, if more than 12 months have elapsed since the previous physical for employment.

An employer shall retain the certificate on file for the duration of the minor's employment. Upon termination of employment, or expiration of the employment certificate's period of validity, the certificate shall be returned to the minor. A certificate may be revoked by school district authorities for cause.

A minor employed as a Newspaper Carrier, Street Trades Worker, Farmworker, or Child Model, must obtain the Special Occupational Permit required.

A minor 14 years of age and over may be employed as a caddy, babysitter, or in casual employment consisting of yard work and household chores when not required to attend school. Employment certification for such employment is not mandatory.

An employer of a minor in an occupation which does not require employment certification should request a Certificate of Age.

PROHIBITED EMPLOYMENT

Minors 14 and 15 years may not be employed in, or in connection with a factory (except in delivery and clerical employment in an enclosed office thereof), or in certain hazardous occupations such as: construction work; helper on a motor vehicle; operation of washing, grinding, cutting, slicing, pressing or mixing machinery in any establishment; painting or exterior cleaning in connection with the maintenance of a building or structure; and others listed in Section 133 of the New York State Labor Law.

Minors 16 and 17 years of age may not be employed in certain hazardous occupations such as: construction worker; helper on a motor vehicle, the operation of various kinds of power-driver machinery; and others listed in Section 133 of the New York State Labor Law.

HOURS OF EMPLOYMENT

Minors may not be employed during the hours they are required to attend school.

Minors 14 and 15 years of age may not be employed in any occupation (except farmwork and delivering, or selling and delivering newspapers):

When school is in session:

- more than 3 hours on any school day, more than 8 hours on a nonschool day, more than 6 days in any week, for a maximum of 18 hours per week, or a maximum of 23 hours per week if enrolled in a supervised work study program approved by the Commissioner.
- after 7 p.m. or before 7 a.m.

When school is not in session:

- more than 8 hours on any day, 6 days in any week, for a maximum of 40 hours per week.
- after 9 p.m. or before 7 a.m.

This certificate is not valid for work associated with newspaper carrier, agriculture or modeling.

Minors 16 and 17 years of age may not be employed: --

When school is in session:

- more than 4 hours on days preceding school days; more than 8 hours on days not preceding school days (Friday, Saturday, Sunday and holidays), 6 days in any week, for a maximum of 28 hours per week.
- between 10 p.m. and 12 midnight <u>on days followed by a school day</u> without written consent of parent of guardian <u>and</u> a certificate of satisfactory academic standing from the minor's school (to be validated at the end of each marking period).
- between 10 p.m. and 12 midnight <u>on days not followed by a school day</u> without written consent of parent or guardian.

When school is not in session:

- more than 8 hours on any day, 6 days in any week, for a maximum of 48 hours per week.

EDUCATION LAW, SECTION 3233

"Any person who knowingly makes a false statement in or in relation to any application made for an employment certificate or permit as to any matter by this chapter to appear in any affidavit, record, transcript, certificate or permit therein provided for, is guilty of a misdemeanor."

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED	INSURER A :	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**GENERAL LIABILITY**						EACH OCCURRENCE	$
	☐ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
	☐ CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person)	$
	500,000 Retained						PERSONAL & ADV INJURY	$
							GENERAL AGGREGATE	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$
	☐ POLICY ☐ PRO-JECT ☐ LOC							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	☐ ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	☐ **UMBRELLA LIAB** ☐ OCCUR						EACH OCCURRENCE	$
	☐ **EXCESS LIAB** ☐ CLAIMS-MADE						AGGREGATE	$
	☐ DED ☐ RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						☐ WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ **(Mandatory in NH)**	N / A					E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

,

Teacher

Employer

Student

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

Memorandum of Agreement

(Form #1)

Type of Work Based Learning Experience: Non-Paid Internship

This Work Based Learning Experience Agreement is entered into by and between the Syracuse City School District (SCSD) _____ (Student), his/her Parents/Guardian, _____ (Parent/Guardian), and his/her Work Experience Employer,_____(Employer), on the date indicated below, whereby the Student will participate in a CTE Internship (Program at the Employer's place of business located at_____, on_____, during the hours of _____.

THE STUDENT UNDERSTANDS THAT HIS/HER CONDUCT IS A REFLECTION UPON THE SCHOOL NAME AND AGREES THAT HE/SHE WILL:

1. Provide his/her own transportation to and from the Employer's place of business (the SCHOOL, the Student's home school, the SCHOOL and the Employer are in no way responsible for providing the Student with transportation to and/or from the Employer's place of business at any time or for any incidents or accidents which may occur while the Student is on route to or from the Employer's place of business)
2. Demonstrate a conscientious attitude and be honest, punctual, cooperative, courteous and willing to learn while at the Employer's place of business.
3. Keep regular attendance as agreed upon with the Employer, excluding Employer-observed holidays, days on which the Employer's place of business is closed or other legal absences and understands that his/her attendance will be taken from his/her weekly attendance reports.
4. Keep regular attendance at his/her home school.
5. Give the Employer as much advance notice as possible if unable to report for work or to do so in a timely manner and contact the CTE teacher at (315)_____.
6. Report to SCHOOL if the Internship location is closed for any reason during at time in which the student is scheduled to be at the Internship location and SCHOOL is in session.
7. Complete weekly time log/record of attendance (Form # 8) reports as required by SCHOOL.
8. Engage in only those work based learning experiences approved by the supervisor at the work-site.

THE EMPLOYER AGREES THAT IT WILL:

1. Not permit the Student to replace any paid employee (in the case of an Internship).
2. Advise the Student of all company rules, regulations and policies which relate to the Student.
3. Explain to the Student the responsibilities and duties of his/her internship and shall correlate on-the-job training with safety instructions given by the SCHOOL.
4. The work of the Student in occupations declared particularly hazardous by the U.S. Department of Labor shall be (i) incidental to the Student's training; (ii) intermittent and for short periods of time; and (iii) under the direct and close supervision of a qualified and experienced person.
5. Provide direct supervision by an authorized employee to the Student as needed.
6. Complete an accident report form and return to SCHOOL in the event of an accident.
7. Review the Student's performance with him/her on a weekly basis and sign a weekly time sheet, complete an evaluation of the Student on forms provided by the SCHOOL.
8. Inform the SCHOOL Instructor/Coordinator when the Student is absent or not performing adequately by calling (315)_____.

9. Observe any and all laws that may relate to the Student's work experience.

THE SCHOOL AGREES THAT IT WILL:

1. Carry the insurance listed for students during class activities including internships, job experiences and workplacement.
2. Accident Insurance: SCHOOL carries tertiary accident insurance to cover medical expenses as a result of an accident.The parent's health insurance is primary and the home school district would be secondary. General Liability Insurance: SCHOOL carries general liability insurance to cover up to one million dollars for a single event. As added protection, a ten million dollar umbrella policy is also in effect.
3. Assist the Student in securing internship placement regardless of his/her sex, race, color, national origin or disability (all inquiries and/or complaints regarding discrimination should be directed to the compliance officer, Patty Clark, SCSD Central Office, 725 Harrison Street, Syracuse, New York 13210. Telephone: (315) 435-4131.
4. Provide the STUDENT with safety instructions correlated by the EMPLOYER with on-the-job training.
5. Review with the Student and the Employer their respective responsibilities and obligations while participating in theProgram.

The parties/signatories hereby agree that good communication and understanding between them is vital if the objectivesof this Program are to be met and that joint conferences between the Student, Employer, Parent/Guardian, Instructor, andothers may be scheduled from time to time in order to discuss:

1. the student's progress
2. any misunderstandings
3. the reason for termination of the Agreement

This Agreement is not in effect until signed by all parties. This Agreement may be terminated at any time by any partyupon written notice to the other parties.

We the undersigned, have reviewed and agreed to the terms and conditions set forth herein.

Date __/__/__ _____ Student

Date __/__/__ _____ Parent/ Guardian

Date __/__/__ _____ Daytime Phone

_____ Evening Phone

Date __/__/__ _____ Employer/ Supervisor

Date __/__/__ _____ CTE Teacher

Date __/__/__ _____ Home School Principal

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Inquiries regarding the District's non-discrimination policies should be directed to: Executive Director of Student Support Services, Civil Rights Compliance Officer, Syracuse City School District, 725 Harrison Street • Syracuse, NY 13210(315) 435-4131, Email: CivilRightsCompliance@scsd.us

Teacher

Student

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

CTE Internship Program Application Form

(Form #2)

Personal Information

Last Name	First Name	Age	Date of Birth
Street		Home Telephone Number	Cell Phone Number
City, State, Zip		Emergency Contact Name	Telephone Number
Email Address		Relationship to Emergency Contact	
Primary Parent/ Guardian Name		Parent/ Guardian's Telephone Number Home Cell	
Primary Parent/ Guardian Email			
Secondary Parent/ Guardian Name		Secondary Parent/ Guardian's Telephone Number Home Cell	
Secondary Parent/ Guardian Email			
Working Papers Certificate Number		SCSD Student schedule should be attached to this form School Counselor	

School Year Training/ Work Schedule Availability

Please list the hours you can work during a typical weekly schedule

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Please check ☐ Fixed Schedule ☐ Schedule will vary

Sports, Clubs, and Other Activities

Transportation

Please check the appropriate response

Do you have a license? ☐ Yes ☐ No	If YES, which license do you have? ☐ Full License ☐ Junior License
Do you drive to school? ☐ Yes ☐ No	License Number:

If you do not have a license, how do you plan on getting to and from your internship?

☐ Public Transportation ☐ Other

Teacher

Student

(Form #2 Continued)

INSURANCE COVERAGE IN CASE OF INJURIES TO STUDENT AT INTERNSHIP:

EMPLOYER'S WORKER'S COMPENSATION MUST COVER THE STUDENT IN CASE OF INJURIES AT TRAINING SITE.

PROGRAM AWARENESS STATEMENT TO BE CHECKED BY STUDENTS:

- ☐ In order to receive credit for my work-based learning experience, I must be training at a legal site approved by theschool's CTE Teacher or work-based learning coordinator.
- ☐ I must notify my CTE teacher or work-based learning coordinator immediately if there is a change of work schedule orduties at the training site.
- ☐ Failure to report any disciplinary action, termination, or proper documentation of hours may result in the student notearning school credit.
- ☐ Students must present all daily attendance records to CTE teacher or work-based learning coordinator weekly andcomplete all assignments related to the program.
- ☐ I must immediately notify my work-based learning coordinator if I have or develop any medical condition(s) whichaffects my ability to participate in training, such as allergies, lifting heavy items, movement, standing, sitting, migraine headaches, etc. If there are any current conditions, please state them below. The presence of such a condition will not necessarily preclude me from participating in the internship and accommodations may be provided.

PARENTAL/GUARDIAN PERMISSION AND PICTURE/NEWS STORY RELEASE:

I give my child, _____ permission to participate in the work-based learninginternship at the Syracuse City School District. By signing the parental permission form, it is understood that:

- All the information is accurate.
- In order to receive credit, students must work a minimum of 150 hours during the school year.
- All students must report to CTE teacher or work-based learning coordinator in the case of any change in employment.
- Failure to report any disciplinary action, termination, or proper documentation may result in the student not earning schoolcredit.
- Students must present all daily attendance records to CTE teacher or work-based learning coordinator weekly and complete allassignments related to the program.
- A student with a junior license must only drive to school if they go directly to work following the school day and they must carrywith them the proper paperwork as directed by the work-based learning coordinator.

In addition to agreeing with the above statements, please check off one:

- ☐ I give permission for my child's photograph or name to be used to promote the Work Experience Program.
- ☐ I do not want my child's photograph or name to be used to promote the Work Experience Program.

_____	_____	_____
Parent/ Guardian's Name	Parent/ Guardian's Signature	Date / /
_____		
Relationship to Student		
_____	_____	_____
Student's Name	Student's Signature	Date / /

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Teacher

Employer

Student

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

CTE Internship Ready to Work Assessment

(Form #3)

Name _____ Program _____ Date ____/____/____

Scale

1 = Seldom. 2 = Occasionally. 3 = Usually. 4 =

ZEST				
1	Actively participates			
2	Shows enthusiasm			
3	Invigorates others			
GRIT				
4	Finishes whatever he or she begins			
5	Tries very hard even after experiencing failure			
6	Works independently with focus			
SELF CONTROL SCHOOL WORK				
7	Comes to class prepared			
8	Pays attention and resists distractions			
9	Remembers and follows directions			
10	Gets to work right away rather than procrastinating			
SELF-CONTROL INTERPERSONAL				
11	Remains calm even when criticized or otherwise provoked			
12	Allows others to speak without interruption			
13	Is polite to adults and peers			
14	Keeps his/her temper in check			

OPTIMISM				
15	Gets over frustrations and setbacks quickly			
16	Believes that effort will improve his or her future			
GRATITUDE				
17	Recognizes and shows appreciation for others			
18	Recognizes and shows appreciation for his/her opportunities			
SOCIAL INTELLIGENCE				
19	Is able to find solutions during conflicts with others			
20	Demonstrates respect for feelings of others			
21	Knows when and how to include others			
CURIOSITY				
22	Is eager to explore new things			
23	Asks and answers questions to deepen understanding			
24	Actively listens to others.			
ACADEMIC PERFORMANCE				
25	Completes all assignments with quality and timeliness			
26	Uses tools appropriately and safely			
COMMITMENT				
27	Attends class with one or less absences per quarter			
28	Demonstrates loyalty and appreciation to the program and instructors			

Teacher

Employer

Student

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

CTE Internship Training Plan

(Form #4)

Student's Name	Email	
Student's Address	Telephone	Date of Birth
CTE Program Career Cluster	Working Papers Certificate #	
School Coordinator		
Phone Number		
Fax Number		
Email		
Employer		
Phone Number		
Fax Number		
Email		
Immediate Job Supervisor		
Phone Number		
Email		
Corporate Address		

Training Schedule

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Insurance Coverage

- ☐ Student is a non-paid intern – Worker's Compensation
- ☐ Student is a non-paid observer – Worker'sCompensation

Transportation Provided by

- ☐ Student/parent will provide own transportation
- ☐ School district will provide transportation during school hours

Goals for this Work-Based Learning Student:

1. To explore, learn and develop the skills necessary for this career.
2. To develop the Career Ready Practices necessary for success in the global, competitive world.
3. To be trained in the safe operations of this job title.
4. To be able to demonstrate positive behavior and appropriate dress.

(Form #4 Continued)

JOB TASKS AND LEARNING OUTCOMES (Determined by the Employer and Coordinator)	ACHIEVEMENT LEVEL AND COMMENTS 1. Mastered skill 2. Needs more training at the work site. 3. Needs more training at school. 4. Has not reached this training area.
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

CAREER READY PRACTICES	Always	Frequently	Occasionally	Rarely
1. Student works cooperatively as a team member?	☐	☐	☐	☐
2. Student is able to read instructions for information and application.	☐	☐	☐	☐
3. Student can calculate and measure for information and application.	☐	☐	☐	☐
4. Student can behave in a responsible manner without supervision.	☐	☐	☐	☐
5. Student can communicate verbally and in writing to evoke clear understanding.	☐	☐	☐	☐
6. Student demonstrates good listening and follow through skills.	☐	☐	☐	☐
7. Student demonstrates critical thinking and problem solving skills.	☐	☐	☐	☐
8. Student can locate and manage resources for problem solving.	☐	☐	☐	☐
9. Student demonstrates a positive work ethic.	☐	☐	☐	☐
10. Student demonstrates computer literacy.	☐	☐	☐	☐

Teacher

Employer

Student

(Form #4 Continued)

SAFETY TRAINING	DATE OF SAFETY TRAINING	ACHIEVEMENT LEVEL AND COMMENTS 1. Mastered safety training instruction. 2. Needs more safety training at work site. 3. Needs more safety training at school. 4. Has not reached this training area.
1. Safety precautions related to stairs, floors, office equipment and furniture.		
2. Safety precaution related to proper dress apparel, shoes, gloves, head, eye and ear protection.		
3. Safety precaution related to use of tools, machines, and chemicals.		
4. Safety precautions related to fire, weather and other natural disasters.		
5. Safety precautions related to sexual harassment and workplace violence.		

DRESS AND BEHAVIOR CODE FOR POSITION	ACHIEVEMENT LEVEL AND COMMENTS 1. Dresses/behaves appropriately 2. Needs to modify dress/behavior. 3. Needs personal consultation.

Employer Name	Employer Signature	Date / /
Work-based Learning Coordinator Name Coordinator	Work Based Learning Signature	Date / /
Parent/ Guardian Name	Parent/Guardian Signature	Date / /
Student Name	Student Signature	Date / /

If you have any questions please do not hesitate to contact me at (315) 435-Thank you for your cooperation!

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

SCSD CTE Internship Notification of Unpaid Internship

(Form #5)

This form serves as notification that the Syracuse City School District CTE Internship is an unpaid internship and studentsare not due any wages per New York State Department of Labor.

_____	_____ / /
Student	Date
_____	_____ / /
CTE Teacher/ WBL Coordinator	Date
_____	_____ / /
Worksite Representative/ Mentor	Date

Teacher

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

SCSD Internship Safety Certification

(Form #6)

_____ _____

Student Date (/ /)

_____ _____

Mentor or Supervisor CTE/ WBL Teacher

Student CTE Program SCSD Career and Technical Program:

_____

OSHA 10	☐	/ /
Safe Serv	☐	/ /
First Aid	☐	/ /
CPR	☐	/ /
Other	☐	/ /

Teacher

Employer

Student

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

SCSD Internship Worksite Orientation

(Form #7)

_____ _____

Student Date (/ /)

_____ _____

Mentor or Supervisor CTE/ WBL Teacher

Company Orientation

Directions: Be sure that your student employee obtains information about the factors listed below. Check the information on each item as it is completed. Return the completed form to the CTE Teacher or Work Based Learning Coordinator.

Tour of Workplace

- ☐ A tour of the workplace
- ☐ An overview of the company safety
- ☐ plan Introductions to co-workers

Tour of Employee Facilities

- ☐ Rest rooms
- ☐ Lunch room
- ☐ Where to store personal belongings

Safety Plan

- ☐ Safety plan
- ☐ Stairwell/fire exits
- ☐ Fire Extinguishers
- ☐ Special hazards
- ☐ Accident prevention
- ☐ Safety Training Log, updated as needed

About the Company

- ☐ Discuss company organizational structure
- ☐ Review type of business, products, services
- ☐ Overview of who the customers are

Department/Position Specifics

- Explanation of work schedule
- ☐ Review of dress and conduct
- ☐ code
- ☐ Review of hours, breaks and lunch
- ☐ policies Location of time clock or sign-in
- ☐ Attendance requirements, including procedures for calling in when absent
- ☐ Relationship to working with other departments or co-workers

Job Specific

- ☐ How to use the phones and office
- ☐ equipment Supplies, paper, pens, etc.
- ☐ Job description, Work-Based Learning Plan and evaluation process

Supervisors Expectations

- ☐ Dress code including clothing, hair and jewelry
- ☐ Work performance including productivity and work habits
- ☐ Company culture

Materials provided to intern

- ☐ Copy of personnel
- ☐ handbook Organizational
- ☐ charts Telephone directory
- ☐ Security procedures

_____	____/____/____
Employer/training sponsor	Date
_____	_____
	____/____/____
Student	Date
_____	_____
	____/____/____
CTE Teacher/WBL Coordinator	Date

Teacher

Employer

Student

Syracuse City School District

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

Weekly Time Log/Record of Attendance

(Form #8)

Student _____ Training Title _____

Worksite Supervisor _____

Time Log for the Week of: ____/____/____

	Date	Start Time	End Time	Hours Worked
Sunday				
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				

Total Weekly Hours: _____

Student please list any new tasks performed this week: _____

By signing this timesheet, you are certifying that it is correct and truthful.

_____ _____
/ /
Student's Signature Date

_____ _____ _____
/ /
Supervisor Name Phone Date

_____
Supervisor's Signature

Attention Worksite Supervisor:
If you have any questions or concerns, please contact:
CTE Teacher _____ Phone _____

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Syracuse City School District

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725 Harrison Street, Syracuse, NY 13210

SCSD CTE Internship Student Evaluation (Form #9)

Name _____ CTE Program _____

_____/_____/_____ — _____/_____ /Dates of Internship

_____ Year to Graduate

Please complete this form upon completion of your internship.

	Strongly Agree	Agree	Indifferent	Disagree	Strongly Disagree
Overall, I had a great experience	☐	☐	☐	☐	☐
I was actively involved in the team meetings and felt free to express my thoughts and opinions	☐	☐	☐	☐	☐
My mentors encouraged and responded to my questions	☐	☐	☐	☐	☐
I have an increased appreciation for teamwork	☐	☐	☐	☐	☐
I have a greater ability to ask good questions and synthesize information	☐	☐	☐	☐	☐
I was presented with opportunities to learn by doing	☐	☐	☐	☐	☐
I gained factual knowledge about careers throughout the internship	☐	☐	☐	☐	☐
I would recommend this opportunity to others	☐	☐	☐	☐	☐
My time was well spent	☐	☐	☐	☐	☐
I would consider this employer as a future employer	☐	☐	☐	☐	☐
My co-workers are generally positive about work	☐	☐	☐	☐	☐

The best thing about my experience was... _____

_____

The worst thing about my experience was... _____

_____

Any suggestions on how we could improve the intern experience? _____

Employer

Syracuse City School District
725 Harrison Street, Syracuse, NY 13210

SCSD CTE Internship Mentor Program Evaluation (Form #10)

Student Name

SCSD School

Interning Location

Supervisor/ Mentor Name

Date / /

Internship Preparation

- ☐ Exceptiona
- ☐ IAdequate
- ☐ Inadequate

Modes of Communication with SCSD Personnel

- ☐ In-Person
- ☐ Email
- ☐ Phone

Amount of Communication with SCSD Personnel

- ☐ Exceptionally
- ☐ Appropriate
- ☐ Too much
- ☐ Too little

Suggestions for improvement:

Additional comments:

Return to CTE teacher

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Return to TOC

F. Employability Profile

> *The employability profile is a record of student achievement. That may include documentation of the student's attainment of technical knowledge and work-related skills, endorsements, licenses, clinical experience, work experience, performance on core academic Regent's examinations, performance on industry based assessments, attendance, student leadership honors and achievements and other honors or accolades of student success.*

Process

- An employability profile model is developed for the program
- A profile of student achievement is developed for each student in the program and is maintained in accordance with records and retention policies of the school district/BOCES.
- The profile of student achievement is reviewed and updated on a continuous basis by the student and the appropriate program/guidance personnel.
- The work skills to be mastered by students with disabilities should be aligned with the student's Individualized Education Program (IEP).

Documentation

Recommendations for the employability profile model should be included in the self-study report and reviewed by the external committee.

Source: http://www.p12.nysed.gov/cte/ctepolicy/guide.html

EMPLOYABILITY PROFILE

FIRE-RESCUE

Industry Based Skill Standards

Proficiency Definitions

NA = Not Applicable **1 = Introduced** **2 = Trained** **3 = Trained/Skilled** **4 =Industry Level Certification/ Mastery**

	9th	10th	11th	12th
History of Fire- Rescue				
Understands the historical perspective of Firefighters in the United States and where we are now in the evolution.				
Firefighters				
Demonstrates the basic understanding of duties of Firefighters and the different levels of the Fire Department from local to the federal level.				
Companies				
Identifies the differences in compaines within the Fire Department. Identifies the roles and responsibiliteis within each company. Describes the tools and equipment different companies use.				
Fire Growth/ Behavior				
Understands the elements needed to produce and sustain fire. Identifies patterns in fire growth and development. Demonstrate understanding of fire extension and growth.				
Building Construction				
Explains the 5 types of building construction and identify the construction materials. Describe the dangers of trusses and lightweight construction. Identify fire extension patterns in various building types.				
Federal Emergency Management Agency				
Demonstrates an understanding in the National Incident Management System and the Incident Command System.				
Physical Fitness				
Exhibits knowledge of the Cooper standards both verbally and by executing the test with proper technique. Understands the bands of scoring and how Police Departments use the Cooper standards as requirements for entry or hiring.				
Emergency Care, First Aid, CPR and AED				
Can execute assessment of a casualty and render proper first aid or triage more than one casualty. Upon identification, can administer CPR or AED assisted intervention as needed to support life.				
Drill and Ceremony				
Executes basic standing, facing and marching drill movements as an individual and member of a team. Understands the reason for drill and how it builds teamwork and esprit de corps.				

	9th	10th	11th	12th
HIPPA				
Identifies the purpose and stipulations of HIPPA. Describes how HIPPA protects patient rights and privacy.				
Scene Preservation				
Understands different methods of preserving fire and emrgency scences. Identify indicators of illegal activities.				
Fire Safety/Prevention				
Demonstrates the ability to work with others on teaching methods of fire safety and fire prevention. Works to create new ideas and new methods of delievery of fire safety/ prevention materials.				
Arson Investigation				
Able to understand the different types of forensic evidence and arson indicators. Recognizes arson burn patterns. Demonstrates basic understanding of arson psychology.				
Legal/ Ethical				
Explains the legal protection of First Responders. Identifies the legal requirements of fFirst Responders when dealing with patients or proterty. Discuss ethical dilemnas that First Responders face.				
HazMat				
Able toidentify various HazMat incidents and describe the first steps in response to such. Operates on a HazMat scene at the Operations level. Receive HazMat Operations certification.				
WMD/ IED/ Drug labs				
Demonstrates knowledge of indiators of IEDs and Drug Labs. Able to describe responses to scenes of IEDs and Drug Labs. Descibribes terrorist indicators. Receives IED and WMD certification				
Pre-planning				
Can explain different levels of response for varying emergency types. Creates and implements emergency training drills. Describes importance of pre-planning large/ unique buildings within a fire district.				
Current Events and Issues (Researchability)				
Identifies current issues facing the Fire-Rescue system today in terms of equipment and tactics. Is aware of how to research reports and new stories and evaluate impact using experience.				

Industry Certifications Attained	**Yes**
FEMA 700 NIMS	
FEMA 100 ICS	
American Heart Association 8 hour First Aid, CPR, AED	
NYS Emergency Medical Responder Licensing	
Other:	

College Credits Attained		Yes
	3 CH	
	3 CH	
	3 CH	
Total		

Internships	Hours
Agency	
Agency	
Agency	

FIRE-RESCUE
EMPLOYABILITY PROFILE

Student Name: _____ School Year: _____ Absences: _____

ID Number: _____ Teacher: _____ Final Grade: _____

Career Ready Practices / Career Development Standards

STANDARDS DEFINITIONS

NA = Not Applicable 1 = Developing 2 = Basic 3 = Proficient 4 = Mastery

	9th	10th	11th	12th
Acts as a responsible citizen/employee				
Is on time and prepared, follows workplace policies, demonstrates reliability and dependability, is polite and courteous to adults and peers, demonstrates appreciation, and is reliable and consistent in their actions				
Applies appropriate academic and technical skills				
Demonstrates an understanding of the academic knowledge and skills associated with their trade. Technical skills are developed with academic competencies including English language arts and science that are integrated within the CTE program.				
Attends to personal health and financial well-being				
Recognizes the benefits of physical, mental, social, and financial well-being to the importance of that success in their career. Accepts criticism and works towards self-improvement targets on a consistent basis.				
Communicates clearly, effectively, and with reason.				
Is able to communicate both verbally and in writing to express ideas and obtain information. Uses appropriate vocabulary to share information both verbally and in writing as well. Demonstrates active listening skills and verbal communication.				
Makes appropriate decisions				
Considers the environmental, social, and economic impacts of their decisions. Understands that their actions and decisions will impact other people directly. Works independently and responds positively to new ideas and suggestions.				
Demonstrates creativity and innovative thought				
Demonstrates creativity and new thinking to solve workplace problems as encountered. Is creative, innovative, and is eager to explore new ways of addressing issues and challenges that are encountered.				
Employs valid and reliable research strategies				
Seeks information to develop a deeper understanding of issues encountered. Uses technology as a tool to research, organize, and evaluate information critically incompetently. Interprets information and draws conclusions based on best analysis.				
Uses critical thinking skills and demonstrates perseverance				
Demonstrates problem-solving skills through the use of creative thinking, decision-making, and adaptability. Effectively reasons through difficult situations, and makes decisions even when faced with complex or challenging problems.				

	9th	10th	11th	12th
Models integrity, ethical behavior, and leadership				
Is accountable and transparent in all of their work and assignments. Consistently exhibits ethical behavior, and commitment to completing tasks as assigned. Develops and demonstrates leadership skills, assuming responsibility readily.				
Develops and implements a Career Plan				
Develops a career plan based on understanding of their personal goals and the career pathways that aligns to them. Develops resumes, cover letters, and examples of best work to aid in the job seeking process and/or entrepreneurial goals.				
Uses technology to enhance productivity				
Demonstrates an understanding of the use of technology related to their career pathway. Continually develops their ability to adapt to changing work environments using technology, including new tools and their associated applications.				
Works as a productive and respectful team member				
Actively participates as a member of a team recognizing and appreciating others skills and abilities. Adds to the collective value of the team, and invigorates others to add to the collective efforts and goals.				
Demonstrates reliability and dependability				
Regardless of tasks given, demonstrates reliable and dependable behaviors to meet the expectations as defined. Attendance and levels of participation meet expectations consistently. Take on additional responsibilities without prompting.				
Arrives on time and is prepared to work				
Consistently demonstrates promptness, reliability, and commitment to reporting for classes, work site experiences, and other assignments as defined. Reports prepared for work or education as requirements dictate, meets attendance requirements.				
Demonstrates safe working habits				
When engaging in worksite situations or learning labs, uses tools and equipment safely, observes general safety guidelines for material handling, and meets the expectations of maintaining a safe work environment for others.				
Demonstrates problem solving skills				
Addresses problems encountered using effective problem-solving strategies. Works to define potential solutions to problems, identifies and implements the best solution based on the information gathered and their skill and knowledge.				

Earned Technical Endorsement on Diploma **YES** ☐ NO ☐

Industry Credential(s) Awarded See Reverse Side

Special Recognitions or Scholarships _____

Student Leadership Organization _____

Return to TOC