

Fire Course 4. Firefighter II

Description: Firefighter II is the second in a series for students studying firefighter safety and development. Students will understand Ohio Department of Public Safety fire protection rules and regulations, proper incident reporting and records, proper use of personal protections equipment, and the principles of fire safety. Students will use procedures for use of fire extinguishers, ladder, fire hose, and water supply apparatus.

Outcome	5.23. Incident Management: Explain and apply the actions required within the Incident Management Systems (IMs) for: 1) distinguishing the need for organizing, assuming, and transferring command, 2) applying all applicable National Fire Protection Association, department, and agency having jurisdiction (AHJ) safety procedures while assuming an assigned roll within the IMS system. ([General Knowledge Requirements] National Fire Protection Association [NFPA] 1001 Ch. 6.1.1-6.1.2)				
Competencies	5.23.1. Define the role and responsibilities of a Firefighter 2. 5.23.2. Describe the roles and responsibilities for assuming and transferring command within IMS. 5.23.3. Discuss the responsibilities of the first-arriving fire fighters. 5.23.4. Define the applicable NFPA and other safety regulations. 5.23.5. Define the applicable NFPA standards and other safety regulations. 5.23.6. Demonstrate the ability to determine the need for command. 5.23.7. Organize and coordinate an IMS until command is transferred. 5.23.8. Function within an assignment role within an ICS.				
Pathways		Criminal Justice		X	Fire
Green Practices		Green-specific		Context-dependent	X Does not apply

Outcome	5.24. Records and Documentation: Identify the information required for completing incident reports and explain the reasons for completing thorough, accurate reports. Demonstrate how to obtain pertinent, accurate information while completing a written or electronically generated incident report. ([Department Communications] National Fire Protection Association [NFPA] 1001 Ch. 6.2-6.2.1)				
Competencies	5.24.1. Describe the steps in processing and initiating an emergency response. 5.24.2. List the information that should be included in a basic incident report. 5.24.3. Explain the purpose and usefulness of accurate reports. 5.24.4. Discuss the consequences of inaccurate reports. 5.24.5. List how to obtain the necessary information and the required coding procedures. 5.24.6. Demonstrate the ability to determine necessary codes. 5.24.7. Demonstrate the ability to proof reports and the technology necessary to complete reports.				
Pathways		Criminal Justice		X	Fire
Green Practices		Green-specific		Context-dependent	X Does not apply

Outcome	5.25. Radio Communication: Explain and demonstrate providing radio communications addressing the progress and needs of the team/company.				
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	([Department Communications] National Fire Protection Association [NFPA] 1001 Ch. 6.2.2)				
Competencies	5.25.1. Discuss the standard operating procedures for alarm assignments and fire department radio communication procedures. 5.25.2. Demonstrate the ability to operate fire department communication equipment.				
Pathways		Criminal Justice		X	Fire
Green Practices		Green-specific		Context-dependent	X Does not apply

Outcome	5.26. Foam Application: Explain and demonstrate: 1) choosing the correct type of foam, 2) using the appropriate method and rate of foam application to extinguish given fires, 3) generating and applying foam to reduce hazards, 4) selecting and operating various types of nozzles to apply foam. ([Fire Ground Operations–Foam] National Fire Protection Association [NFPA] 1001 Ch. 6.3.1)				
Competencies	5.26.1. List the methods by which foam prevents or controls a hazard. 5.26.2. Describe the principles by which foam is generated. 5.26.3. Discuss the causes for poor foam generation and corrective measures. 5.26.4. Describe the difference between hydrocarbon and polar solvent fuels and the concentrates that work on each. 5.26.5. Describe the characteristics, uses, and limitations of firefighting foams. 5.26.6. List the advantages and disadvantages of using fog nozzles versus foam nozzles for foam application. 5.26.7. Discuss the techniques for foam stream application. 5.26.8. Describe the hazards associated with foam usage. 5.26.9. List the methods used to reduce or avoid hazards. 5.26.10. Demonstrate the ability to prepare a foam concentrate supply for use. 5.26.11. Assemble foam stream components. 5.26.12. Demonstrate how to approach and retreat from spills as part of a coordinated team.				
Pathways		Criminal Justice		X	Fire
Green Practices		Green-specific		Context-dependent	X Does not apply

Outcome	5.27. Interior Fire Suppression: Evaluate the fire scene and structure stability, select the appropriate tools and equipment, and demonstrate an interior attack on a structure fire, maintaining communication with your team and incident command, performing ventilation, search and rescue of victims, and extinguishing fire located on various levels and grades of the structure. ([Fire Ground Operations–Structure Fires] National Fire Protection Association [NFPA] 1001 Ch. 6.3.2 Note: NFPA 1403, Standard on Live Fire Training Evolutions, applies.)				
Competencies	5.27.1. Discuss the selection of nozzle and hose for fire attack given the different fire situations. 5.27.2. Discuss the selection of adapter and appliances to be used for specific fire ground situations. 5.27.3. Describe the dangerous building conditions created by the fire and fire suppression activities. 5.27.4. List the indicators of a building collapse.				

	5.27.5.	Discuss the effects of fire and fire suppression on wood, masonry (brick, block, stone), cast iron, steel, reinforced concrete, gypsum, wallboard, glass, plaster on lath.				
	5.27.6.	Describe search and rescue and ventilation procedures.				
	5.27.7.	List the indicators of structural instability.				
	5.27.8.	Discuss the suppression approaches and practices for various types of structural fires.				
	5.27.9.	Describe the association between specific tools and special forcible entry needs.				
	5.27.10.	Demonstrate the ability to assemble a team, choose attack techniques for various levels of fire (e.g., attic, grade-level, upper-level, basement), and evaluate and forecast a fire's growth and development.				
	5.27.11.	Select tools for forcible entry.				
	5.27.12.	Demonstrate how to incorporate search and rescue procedures and ventilation procedures in the completion of the attack team efforts.				
	5.27.13.	Identify developing hazardous building or fire conditions.				
	Pathways		Criminal Justice		X	Fire
Green Practices		Green-specific		Context-dependent	X	Does not apply

Outcome	5.28. Life Safety: Explain the procedures, identify hazards, and demonstrate the skills required for: 1) evaluating safety concerns, cylinder contents, and cylinder integrity of a cylinder on fire, 2) identifying safe havens and evacuation procedures, 3) selecting the appropriate tools, equipment, and water application techniques and flow requirements, 3) evaluating, controlling, and extinguishing a flammable cylinder fire. ([Fire Ground Operations–Flammable Cylinder Fire] National Fire Protection Association [NFPA] 1001 Ch. 6.3.3)					
Competencies	5.28.1. Discuss the characteristics of pressurized flammable gases. 5.28.2. Describe the elements of a gas cylinder and the effects of heat and pressure on closed cylinders. 5.28.3. Describe the boiling liquid expanding vapor explosion (BLEVE) signs and effects. 5.28.4. List the methods for identifying content and how to identify safe havens before approaching flammable gas cylinder fires. 5.28.5. Discuss the water stream usage and demands for pressurized cylinder fires. 5.28.6. Discuss what to do if the fire is prematurely extinguished. 5.28.7. Describe the valve types and their operation. 5.28.8. Explain the alternate actions related to various hazards and when to retreat. 5.28.9. Demonstrate the ability to execute effective advances and retreat. 5.28.10. Demonstrate the applicability of various techniques for water application. 5.28.11. Demonstrate the ability to assess cylinder integrity and changing cylinder conditions, operate control valve, and choose effective procedures when conditions change.					
Pathways		Criminal Justice		X	Fire	
Green Practices		Green-specific		Context-dependent		X Does not apply

Outcome	5.29. Fire Investigation: Explain the measures taken and demonstrate the steps required for identifying the origin and cause of a fire and protecting possible
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	evidence of arson. ([Fire Ground Operations–Protecting Evidence] National Fire Protection Association [NFPA] 1001 Ch. 6.3.4)					
Competencies	5.29.1. Discuss the methods to assess origin and cause, type of evidence, and means to protect various types of evidence. 5.29.2. Describe the role and the relationship of Firefighter 1, criminal investigators, and insurance investigators in fire investigations. 5.29.3. Describe the effects and problems associated with removing property or evidence from the scene. 5.29.4. Demonstrate the ability to locate the fire origin area, recognize possible causes, and protect the evidence.					
Pathways	X	Criminal Justice		X	Fire	
Green Practices		Green-specific		Context-dependent	X	Does not apply

Outcome	5.30. Vehicle and Equipment Use: Explain and perform: 1) assessing scene safety and stabilization of a vehicle involved in an accident, 2) assessing the vehicle's strong, weak, and access points, 3) using extrication tools and equipment to remove vehicle components to disentangle a victim, 4) assisting a technical rescue team by retrieving equipment and/or tools and recognizing inherent hazards associated with various types of rescues. ([Rescue Operations] National Fire Protection Association [NFPA] 1001 Ch. 6.4-6.4.2)					
Competencies	5.30.1. Describe the fire department's role at a vehicle accident. 5.30.2. Discuss the points of strength and weakness of an automobile body. 5.30.3. Discuss the dangers associated with vehicle components and systems. 5.30.4. Discuss the safety procedures, uses, and limitations of hand and power tools used for extrication. 5.30.5. Describe the firefighter's role at technical rescue operations. 5.30.6. Discuss the hazards associated with technical rescues. 5.30.7. Discuss the tools used for technical rescue and their uses including good practice. 5.30.8. Demonstrate how to operate hand and power tools used in forcible entry of vehicles. 5.30.9. Demonstrate the usage of cribbing and shoring materials. 5.30.10. Choose and apply techniques for removing vehicle roofs, doors, windshields, windows, steering wheels and columns, and dash boards. 5.30.11. Demonstrate how to identify and retrieve various types of rescue tools for technical rescues. 5.30.12. Demonstrate how to set up effective public barriers. 5.30.13. Assist a rescue team as a member when assigned.					
Pathways		Criminal Justice		X	Fire	
Green Practices		Green-specific		Context-dependent	X	Does not apply

Outcome	5.31. Fire Prevention: Explain current programs and procedures that target reducing fires and life safety hazards through inspections, education, and public relations. Prepare a fire safety survey on an occupied structure, generating recommendations for reducing possible hazards. ([Fire and Life Safety Initiatives, Preparedness, and Maintenance] National Fire Protection Association [NFPA] 1001 Ch. 6.5-6.5.1)					
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Competencies	5.31.1. Describe organizational policies and procedures. 5.31.2. Discuss the common causes of fire and their prevention. 5.31.3. Explain the importance of public safety survey and public fire education programs to a fire department public relations and the community, including referral procedures. 5.31.4. Demonstrate the ability to complete forms, recognize hazards, match findings to pre-approved recommendations, and effectively communicate findings to occupants or referrals.					
Pathways		Criminal Justice		X	Fire	
Green Practices		Green-specific		Context-dependent	X	Does not apply

Outcome	5.32. Community Outreach: Discuss the basic presentation skills and knowledge requirements needed for conducting a safety presentation using prepared materials. Demonstrate a safety presentation to a small group of people during a station tour. ([Fire and Life Safety Initiatives, Preparedness, and Maintenance] National Fire Protection Association [NFPA] 1001 Ch. 6.5.2)					
Competencies	5.32.1. Describe parts of informational materials and how to use them. 5.32.2. Discuss basic presentation skills and departmental standard operating procedures for giving fire station tours. 5.32.3. Demonstrate the ability to document presentation and to use prepared materials.					
Pathways		Criminal Justice		X	Fire	
Green Practices		Green-specific		Context-dependent	X	Does not apply

Outcome	5.33. Safety Inspection: Explain the procedures for conducting a pre-incident survey and prepare a pre-incident report, use appropriate forms, prepare a diagram of the structure (using common symbols to designate the water supply, fire detection and suppression systems, construction features, and utilities) and identify special features and hazards associated with the structure.([Fire and Life Safety Initiatives, Preparedness, and Maintenance] National Fire Protection Association [NFPA] 1001 Ch. 6.5.3)					
Competencies	5.33.1. Describe the source of water supply for fire protection. 5.33.2. Discuss the fundamentals of fire suppression and detection systems. 5.33.3. Discuss the common symbols used in diagramming construction features, utilities, hazards, and fire protection systems. 5.33.4. Explain the departmental requirements for a pre-incident survey and form completion and the importance of accurate diagrams. 5.33.5. Demonstrate the components of fire suppression and detection systems and sketch the site, buildings, and special features. 5.33.6. Perform the ability to detect hazards and special considerations to include in the pre-incident sketch. 5.33.7. Demonstrate the ability to complete all related departmental forms.					
Pathways		Criminal Justice		X	Fire	
Green Practices		Green-specific		Context-dependent	X	Does not apply

Outcome	5.34. Tool Maintenance: Explain and demonstrate the cleaning and maintenance of power plants, power tools, lighting equipment, and hand tools. Complete					
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	appropriate maintenance records. ([Fire and Life Safety Initiatives, Preparedness, and Maintenance] National Fire Protection Association [NFPA] 1001 Ch. 6.5.4)				
Competencies	5.34.1. Discuss the types of cleaning methods. 5.34.2. Explain the correct cleaning solvents. 5.34.3. Describe manufacturer's and departmental guidelines for maintaining equipment and documentation. 5.34.4. Explain the problem-reporting practices. 5.34.5. Demonstrate the ability to select correct tools, follow guidelines, and complete recording and reporting procedures. 5.34.6. Demonstrate the ability to operate power plants, power tools, and lighting equipment.				
Pathways		Criminal Justice		X	Fire
Green Practices		Green-specific		Context-dependent	X Does not apply

Outcome	5.35. Hose Maintenance: Explain the processes and demonstrate the procedures for inspecting, testing, and placing hose out-of-service and completing documentation of test results. ([Fire and Life Safety Initiatives, Preparedness, and Maintenance] National Fire Protection Association [NFPA] 1001 Ch. 6.5.5)				
Competencies	5.35.1. Discuss the procedures for safely conducting hose service testing. 5.35.2. Describe the indicators that dictate any hose be removed from service and recording procedures for hose test results. 5.35.3. Demonstrate the ability to operate a hose testing and nozzles and to record the results.				
Pathways		Criminal Justice		X	Fire
Green Practices		Green-specific		Context-dependent	X Does not apply