

# FIRE PROTECTION TECHNOLOGY (FRP)

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## FRP 101: FF Safety and Survival (3)

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services

**Terms Typically Offered:** Winter

## FRP 111: Bldg Constr-Fire Suppression (3)

This course provides the components of building construction related to firefighter life and safety. The elements of construction and design to structure are shown to be key factors when inspecting buildings, preplanning fire operations and operating at emergencies

**Terms Typically Offered:** Fall

## FRP 121A: Elementary Fire Science Part 1 (4)

Elementary Fire Science covers basic firefighting skills of a firefighter including the following: Principles of Fire Behavior, Fire Streams, Ventilation, Breathing Apparatus, Search and Rescue Practices, Ropes and Knots, Portable Fire Extinguishers, Ladders, Fire Hose, Salvage Covers, Small Hand Tools, and Firefighter Safety. This class is part 1 or a two part class leading to NFPA/ DPSST firefighter certification

**Terms Typically Offered:** Fall

## FRP 121B: Elementary Fire Science Part 2 (4)

Elementary Fire Science Part 2 covers advanced firefighting skills of a firefighter including the following: Exterior and interior structural fire attack, Search and Rescue Practices, Understand the Mayday procedures. Demonstrate controlling vehicle fires, working in an ICS management system. The student will use Principles of Fire Behavior, Fire Streams, Ventilation, Breathing Apparatus, Search and Rescue Practices, Ropes and Knots, Portable Fire Extinguishers, Ladders, Fire Hose, Salvage Covers, Small Hand Tools, and Firefighter Safety learned in part 1 of this class.

**Registration-Enforced Prerequisite:** FRP 121A.

**Terms Typically Offered:** Winter

## FRP 122: Fundamentals Fire Protection (3)

This course explores the fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; and life safety education; fire investigation

**Terms Typically Offered:** Fall

## FRP 123: Hazardous Materials (4)

Hazardous Materials is designed for entry-level firefighters, as well as industrial fire brigade or safety team members. This course covers how to recognize and handle emergencies involving hazardous materials, within the scope of an Awareness and Operations level responder. It includes: hazard recognition, responding, intervening, and stabilizing the situation

**Terms Typically Offered:** Fall

## FRP 132: Fire Pump Const-Operation (3)

Theory of pump operation, types and features of various pumps, practical operation of fire pumps and accessories. Includes drafting, hydrant and tanker operations, and "rule-of-thumb" fire ground hydraulic calculations. Students should also receive actual practice using local department's apparatus. Meets or exceeds intent of: NFPA 1001-5.1, 5.2, NFPA 1002-4.1, 4.2, 4.3, 5.1, 5.2, 8.1, 8.2, 10.1, 10.2 Annex B.1.

**Registration-Enforced Prerequisite:** FRP 230 or instructor approval.

**Terms Typically Offered:** Spring

## FRP 133: Natural Cover Fire Protection (3)

Studies causes, prevention, fire behavior, standing orders, and fire suppression methods of natural cover fires. Focuses on urban interface fire problems. Meets or exceeds intent of: NWCG-S-130, S-190, I-100, L180

**Terms Typically Offered:** Winter

## FRP 135: Hazardous Materials Chemistry (2)

This course explores basic chemistry relating to the categories of hazardous materials including recognition, identification, reactivity, and health hazards encountered by emergency services

**Terms Typically Offered:** Winter

## FRP 159: Fire Behavior and Combustion (3)

This course explores the theories and fundamentals of how and why fires start, spread and how fires are controlled

**Terms Typically Offered:** Fall

## FRP 201A: Rough Terrain (1)

Introduction to techniques and equipment of vertical rescue operations and Fire Rescue Practices, for fire department rescuers using advance rope and raising practices as per the NFPA 1670 standards. Meets or exceeds intent of: NFPA 1670 6.1-6.4

**Terms Typically Offered:** Spring

## FRP 201B: Swiftwater Rescue (1)

This course is designed to provide students with knowledge and skills to function safely under emergency conditions present during water rescue operations. The students will use advanced rope and water rescue practices as per the NFPA 1670 standards. Meets or exceeds intent of: NFPA 1670 9.1-9.4

**Terms Typically Offered:** Summer

## FRP 201C: Vehicle Extrication (1)

Elementary procedures of rescue practices, systems, components, support, and control of rescue operations. The students will use extrication techniques as per the NFPA 1670 standards. Meets or exceeds intent of: NFPA 1670 8.1-8.4

**Terms Typically Offered:** Winter

## FRP 202: Fire Protection Systems (3)

This course provides information relating to the features of design and operation of fire alarm systems, water based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers

**Terms Typically Offered:** Winter

## FRP 212: Fire Investigation (3)

This course is intended to provide the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause. Preservation of evidence and documentation, scene security, motives of the fire setter, and types of fire causes.

**Prerequisite:** Second-year standing or instructor approval.

**Terms Typically Offered:** Winter

## FRP 213: FF Tactics and Strategy (3)

This course provides the principles of fire ground control through utilization of personnel, equipment and extinguishing agents. This course explores fire service history, fire related laws, fire codes and national standards that effect developing and implementing firefighting tactics and strategies.

**Registration-Enforced Prerequisite:** FRP 111 FRP 159, or instructor approval.

**Terms Typically Offered:** Winter

**FRP 230: Fire Service Hydraulics (4)**

This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems.

**Registration-Enforced Prerequisite:** FRP 132.

**Terms Typically Offered:** Winter

**FRP 280: Fire Related Skills (1-13)**

Orientation to fire incident related experience courses, engine company organization, engine configuration, small tools and minor equipment carried, basic hose practices, basic hose lays, use of protective breathing apparatus, response, district maps, phantom box areas, communication procedures, fire apparatus driving practices. Completion of FRP 280 (6 credits) meets Department of Public Safety Standards and Training (DPSST) NFPA Fire Fighter I.

**Registration-Enforced Prerequisite:** Instructor approval required.

**Terms Typically Offered:** Fall, Winter, Spring, Summer