

# FT COURSE STUDENT LEARNING OUTCOMES

## FT 100 - Introduction to Emergency Services

Students will be able to apply the functions and operational elements of each of the Emergency Services disciplines.

Students will be able to identify the political subdivisions of each Emergency Service and describe how each is incorporated into a comprehensive service delivery model that incorporates best practices.

## FT 101 - Introduction to Fire Protection

CSLOs are under review.

## FT 102 - Entry Level Firefighter

Students will be able to describe and apply the principles of basic firefighting skills.

Students will be able to demonstrate principle applications of how to fight fire safely and efficiently.

Students will be able to understand and demonstrate the physical fitness standards of an entry-level firefighter.

## FT 106 - Firefighter I Academy

Students will be able to apply the principles and organizational structure of the Incident Command System (ICS-100/200/700/800/2200) to manage and coordinate simulated emergency incidents.

Students will be able to recognize, assess, and manage medical, traumatic, and cardiopulmonary emergencies by providing appropriate first aid, high-quality CPR/AED use, bleeding control, shock management, and infection control in accordance with current AHA guidelines.

Students will be able to demonstrate their knowledge and skills in wildland firefighting by applying NWCG S-130, S-190, L-180, and FFT2 competencies during initial attack and safety-focused operations.

Students will be able to demonstrate Hazardous Materials Awareness- and Operations-level competencies, including defensive and offensive actions, in alignment with NFPA 1072 standards.

Students will be able to perform foundational structural firefighting tasks and demonstrate competencies related to fire behavior, suppression principles, SCBA use, search and rescue, ladders, ventilation, and fireground safety.

## FT 109 - Internship in Firefighting

Students will be able to demonstrate the ability to synthesize the skills of both the Fire Fighting I and II certifications.

Students will be able to demonstrate understanding of departmental SOPs, response procedures, and safety standards.

Students will be able to exhibit teamwork, communication, and leadership skills in a professional fire service environment.

Students will be able to integrate classroom knowledge into practical field applications in both structure and wildland contexts.

Students will be able to demonstrate professionalism, punctuality, and adherence to ethical and safety standards.

## FT 110 - Basic Wildland Firefighting

Students will be able to describe and apply basic Incident Command System principles.

Students will be able to explain National Incident Management System.

Students will be able to demonstrate wildland fire suppression techniques.

Students will be able to summarize wildland fire behavior, weather influences on suppression and human factors that affect safety and production.

## FT 113 - Basic Air Ops, S-270

Students will be able to identify and describe key aircraft types and their roles in wildland fire operations.

Students will be able to demonstrate proper safety protocols when operating near aircraft.

Students will be able to describe the roles of air attack, helicopter coordinator, and ground personnel in an incident.

Students will be able to use proper air-to-ground communication protocols.

## FT 115 - Crew Boss, S-230

Students will be able to explain the organizational role and authority of a Crew Boss within ICS.

Students will be able to demonstrate effective leadership and crew supervision in dynamic fireline conditions.

Students will be able to identify hazards and apply mitigation strategies using IRPG and NWCG protocols.

Students will be able to develop and communicate tactical assignments that support incident objectives.

Students will be able to accurately complete ICS documentation (CTRs, ICS-214) and timekeeping reports.

Students will be able to lead and evaluate simulated fireline operations using tactical planning and situational awareness.

## FT 121 - Fire Prevention I

Students will be able to conduct a building fire safety survey that incorporates extinguishing systems, alarm systems and water flow capabilities.

Students will be able to synthesize the policies and procedures regarding reports of fires from the initial response to a multiple alarm response.

Students will be able to synthesize the principles of fire prevention, laws, policies and procedures as they apply to fire prevention, detection, suppression and investigation.

## FT 122 - Codes/Ordinances I

Students will be able to synthesize principles of how codes and ordinances relate to fire prevention.

Students will be able to synthesize principles of how the codes and ordinance apply to different types of business.

Students will be able to synthesize principles of how the codes and ordinances apply to building construction.

## FT 125 - Build Construction I

CSLOs are under review.

## FT 131 - Hazardous Materials

CSLOs are under review.

## FT 146 - Wildland Tactics and Strategy I

Students will be able to identify and apply key principles of wildland firefighting strategies and tactics.

Students will be able to perform a size up and develop a strategic plan for initial and extended attack situations.

Students will be able to utilize maps and topographic features in deployment of firefighting resources.

Students will be able to demonstrate appropriate selection and application of suppression tactics (e.g., direct, indirect, parallel).

Students will be able to analyze tactical operations using real world case studies and AAR methodology.

Students will be able to apply risk management and LCES principles in developing tactical objectives.

## FT 151 - Fire Protection Hydraulics and Water Supply

Students will be able to synthesize principles and applications of proper fire stream development and the safety concerns that go along with those practices.

Students will be able to synthesize principles and applications of proper hydraulic calculations and operation of fire streams.

Students will be able to synthesize the principles of different fire streams and the related safety concerns.

## FT 200 - Leadership and Ethics in Emergency Service

Students will be able to identify the 12 elements of leadership and describe how they are used to deliver effective leadership in emergency services.

Students will be able to, through role play, select and apply appropriate leadership styles towards a given work environment scenario in order to reduce conflict.

## FT 206 - Firefighter II Academy

Students will be able to demonstrate the ability to perform all of the practical requirements for NFPA 1670 rescue operations at the awareness level, extrication at the operational level, and rope rescue at the operational level.

Students will be able to demonstrate the ability to synthesize elements of a HAZ MAT procedure, establish a basic decontamination line; identify hazardous substances using placards and shipping papers; develop a basic incident action plan including evacuation zones, hot zones, warm zones, cold zones, and mitigation recommendations.

Students will be able to demonstrate the ability to synthesize principles and applications of the components of rescue operations at the awareness level, extrication at the operational level, and rope rescue at the operational level.

## FT 212 - Fire and Ecology

Students will be able to describe the physical processes of fire, factors influencing surface and crown fire spread, and how fire interacts with ecosystem dynamics.

Students will be able to apply standard fire behavior models and use accurate terminology in fire management contexts.

Students will be able to analyze different fire regimes and evaluate their ecological effects across a variety of ecosystems.

Students will be able to integrate ecological, legal, cultural, and social factors into fire management planning and decision making.

Students will be able to design and critically evaluate fire monitoring protocols and interpret data to assess ecological effects and fuel changes over time.

## FT 218 - Intermediate Fire Behavior, 290/390

Students will be able to explain and analyze the components of the fire environment and their interrelationships in determining wildland fire behavior.

Students will be able to interpret weather data and forecast information to predict fire potential and operational risk.

Students will be able to assess fuel models and conditions to calculate potential flame length, rate of spread, and fire intensity.

Students will be able to apply fire behavior models and tools (e.g., BehavePlus or nomograms) to predict fire growth and behavior under varying conditions.

Students will be able to integrate fire behavior predictions into operational planning, including strategies for suppression, structure protection, and firefighter safety.

Students will be able to evaluate real-world fire scenarios to identify key fire behavior influences and operational outcomes.

Students will be able to demonstrate situational awareness and safety judgment when interpreting and communicating fire behavior information to crews and supervisors.