

# FIRE SCIENCE (FIRE)

## Community and Technical College

Fire Science Program (<https://www.ctc.uaf.edu/programs/fire-science/>)  
907-455-2800

### FIRE F101 Principles of Emergency Services

3 Credits

Offered Spring

Overview of fire protection, career opportunities, philosophy and history of fire protection/service. Fire loss analysis, organization and function of public/private protection services. Fire departments as part of local government, laws/regulations affecting fire services, fire service nomenclature, fire protection functions. Fire chemistry and physics, fire protection systems, fire strategy and tactics.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### FIRE F105 Fire Prevention

3 Credits

Offered Spring

The history and philosophy of fire prevention, organization and operation of a fire prevention bureau. Use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### FIRE F107 Strategy and Tactics

3 Credits

Offered Spring

The principles of fire control through utilization of personnel, equipment and extinguishing agents on the fire ground.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### FIRE F110 Introduction to Hazardous Waste Operations and Emergency Response

3 Credits

Offered As Demand Warrants

Review of federal and state hazardous materials laws and regulations. Career opportunities related to the field of hazardous materials including transportation, emergency response, site clean up and Incident Command System (ICS).

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### FIRE F115 Fire Apparatus and Equipment

3 Credits

Offered As Demand Warrants

Fire apparatus design, specifications and performance capabilities, effective use of apparatus in fire emergencies.

**Prerequisites:** FIRE F101.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### FIRE F117 Rescue Practices

3 Credits

Offered Fall

Rescue situations and techniques including vehicle extrication, rescue carries, ventilation principles, structural rescue, use of portable hand and power tools, wildland/canine search and rescue, ice and water rescue and emergency life saving principles. All students are required to wear a complete set of fire department-approved protective clothing (turnout gear). Limited quantities are available for loan through the emergency services program coordinator. An eight-hour personal protective equipment and self-contained breathing apparatus safety orientation must be completed in order to participate in live fire exercises.

**Prerequisites:** EMS F170.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### FIRE F121 Fire Behavior and Combustion

3 Credits

Offered Fall and Spring

Theories and fundamentals of how and why fires start, spread, and how they are controlled.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### FIRE F123 Fire Investigations I

3 Credits

Offered As Demand Warrants

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 firesetter and types of fire causes.

**Prerequisites:** FIRE F101.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

### FIRE F127 Vessel Safety: Emergency Equipment, Procedures and Drills

1 Credit

Offered As Demand Warrants

Introduction to safe boating practices and skills including boat handling, rules of navigation, proper safety equipment, weather, boat trailering, lines and knots, first aid and emergency procedures.

**Lecture + Lab + Other:** 1 + 0 + 0

**Grading System:** Pass/Fail Grades

### FIRE F131 Firefighter I, Series I

3 Credits

Offered Fall and Summer

The initial phase in a four-phase process for achieving Alaska State Fire Fighter I certification. Fundamental knowledge of fire behavior, fire organizations, types of fire equipment emergency response services possess and methods of use. Successful completion of all four phases will qualify students for Alaska State Fire Fighter I certification. Limited quantities are available for loan through the Emergency Services Program coordinator.

**Prerequisites:** All students are required to wear a complete set of fire department approved protective clothing (turnout gear).

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F133 Firefighter I, Series II**

3 Credits

Offered Fall and Spring

The second phase in a four-phase process for achieving State of Alaska Fire Fighter I certification. Fundamental knowledge of fire behavior, fire organizations, types of fire equipment emergency response services possess and methods of their use. Limited quantities are available for loan through the emergency services program coordinator. An 8 hour Personal Protective equipment (PPE) and Self-Contained Breathing Apparatus (SCBA) safety orientation available each semester must be completed in order to participate in live fire exercises.

**Prerequisites:** All students are required to wear a complete set of fire department approved protective clothing (turnout gear).

**Special Notes:** Successful completion of all four phases will qualify the student for Alaska State Fire Fighter I certification.

**Lecture + Lab + Other:** 2 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F135 Firefighter I, Series III**

3 Credits

Offered Fall and Spring

The third phase in a four-phase process for achieving State of Alaska Fire Fighter I certification. Fundamental knowledge of fire behavior, fire organizations, types of fire equipment emergency response services possess and methods of their use. Limited quantities are available for loan through the Emergency Services program coordinator. An 8 hour Personal Protective equipment (PPE) and Self-Contained Breathing Apparatus (SCBA) safety orientation is available each semester and must be completed in order to participate in live fire exercises.

**Prerequisites:** All students are required to wear a complete set of fire department approved protective clothing (turnout gear).

**Special Notes:** Successful completion of all four phases will qualify the student for Alaska State Fire Fighter I certification.

**Lecture + Lab + Other:** 2 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F137 Firefighter I, Series IV**

3 Credits

Offered Fall and Spring

The final phase in a four-phase process for achieving State of Alaska Fire Fighter I certification. Fundamental knowledge of fire behavior, fire organizations, types of fire equipment emergency response services possess and methods of their use.

**Special Notes:** Successful completion of all four phases will qualify the student for Alaska State Fire Fighter I certification.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F143 Firefighter Internship, Series 1**

1 Credit

Offered As Demand Warrants

Practical experience in fire operations and training by arrangement through local fire departments.

**Lecture + Lab + Other:** 0 + 2 + 0

**Grading System:** Pass/Fail Grades

**FIRE F145 Firefighter Internship, Series 2**

1 Credit

Offered As Demand Warrants

Practical experience in fire operations and training by arrangement through local fire departments.

**Prerequisites:** FIRE F143.

**Lecture + Lab + Other:** 0 + 2 + 0

**Grading System:** Pass/Fail Grades

**FIRE F147 Firefighter Internship, Series 3**

1 Credit

Offered As Demand Warrants

Practical experience in fire operations and training by arrangement through local fire departments.

**Prerequisites:** FIRE F145.

**Lecture + Lab + Other:** 0 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F151 Wildland Firefighter I**

3 Credits

Offered As Demand Warrants

Designed to provide entry-level wildland firefighters the skills and knowledge to safely function as a member of a firefighting crew. Includes fundamental knowledge of wildland fire organization, fire behavior, suppression methods, safety and the incident command system.

**Cross-listed with** WFS F151.

**Special Notes:** Successful course completion combined with national age and physical fitness requirements will qualify the student for an interagency fire qualification card (red card) with a rating of Firefighter (FFT2).

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F154 Basic Wildland Fire Safety**

1.5 Credits

Offered As Demand Warrants

Designed to meet the training needs of the Advanced Wildland Firefighter. The course includes development of a personal safety program and creating a list of performance standards based on the LCES mnemonic. This course is based on National Wildfire Coordinating Group (NWCG) courses.

**Prerequisites:** FIRE F151.

**Special Notes:** NWCG courses include: S-134 LCES.

**Lecture + Lab + Other:** 1.5 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F155 Wildland Fire Behavior I**

2 Credits

Offered As Demand Warrants

This course is a classroom-based skills course designed to prepare the prospective fireline supervisor to undertake safe and effective fire management operations. It serves to develop fire behavior prediction knowledge and skills. Fire environment differences are discussed as necessary; instructor will stress local Alaskan conditions. This course is based on a National Wildfire Coordinating Group (NWCG) course.

**Prerequisites:** FIRE F151.

**Special Notes:** NWCG courses include: S-290 Intermediate Wildland Fire Behavior.

**Lecture + Lab + Other:** 2 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F159 Wildland Fire Urban Interface Operations**

2 Credits

Offered As Demand Warrants

Designed to assist both structural and wildland firefighters who will be making tactical decisions when confronting wildland fire that threatens life, property and improvements in the wildland/urban interface. Instructional units include interface awareness, size-up, initial strategy and incident action plan, structure triage, structure protection tactics, incident action plan assessment and update, follow up and public relations, and firefighter safety in the interface. This course is based on a National Wildland Coordinating Group (NWCG) course.

**Prerequisites:** FIRE F151 and WFS F153.**Special Notes:** NWCG courses include: S-215 Fire Operations in the Wildland/Urban Interface.**Lecture + Lab + Other:** 2 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F161 Incident Logistics Function**

2 Credits

Offered As Demand Warrants

Overview of the support and service branches of the logistics function within the incident command system. Emphasis on entry-level positions of ordering manager, receiving and distribution manager, base camp manager, equipment manager, incident communications manager, security manager and radio operator. This course is based on a number of individual National Wildfire Coordinating Group (NWCG) job aids. NWCG courses include: J-252 Ordering Manager; J-253 Receiving and Distribution Manager; J-254 Base/Camp Manager; J-255 Equipment Manager; J-257 Incident Communications Manager; J-259 Security Manager; J-158 Radio Operator.

**Lecture + Lab + Other:** 2 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F163 Wildland Fire Dispatch I**

2 Credits

Offered As Demand Warrants

The purpose of this course is to provide students with the skills to perform as a dispatch recorder. Topics include the structure of the expanded dispatch organization, description of resource ordering processes, and the importance of effective communication skills and working relationships. Additionally, the course provides a solid foundation on the use of Resource Ordering Status System (ROSS), addressing the functions and capabilities of ROSS that will be used by most dispatchers. This is an interactive course that combines lecture and hands on practice in the application. This course is based on National Wildfire Coordinating Group (NWCG) courses: D-110 Expanded Dispatch Recorder; ROSS Dispatch – Basic.

**Lecture + Lab + Other:** 2 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F165 ICS and the Incident Planning Function**

2 Credits

Offered As Demand Warrants

An overview of the Incident Command System principles and planning processes, organizational relationships with other functions, use of planning matrix board, resource management, documentation, demobilization, use of technical specialist and components of an incident action plan. This course is based on Federal Emergency Management Agency (FEMA) courses: I-200 Basic ICS: ICS for Single Resources and Initial Action Incidents; I-300 Intermediate ICS: ICS for Supervisors.

**Prerequisites:** FIRE F151.**Lecture + Lab + Other:** 2 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F170 Incident Information**

2 Credits

Offered As Demand Warrants

This course provides students with the skills and knowledge needed to serve as an entry-level public information officer (PIOF) during an incident or event. Establishing and maintaining an incident information operation, internal and external audience communication, working with news media, handling special situations, and long-term planning and strategy.

**Prerequisites:** FIRE F151.**Special Notes:** This course is based on National Wildfire Coordinating Group (NWCG) courses: S-203 Introduction to Incident Information.**Lecture + Lab + Other:** 2 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F176 Wildland Fire Ignition Operations**

1 Credit

Offered As Demand Warrants

This course introduces the roles and responsibilities of a firing boss (FIRB), common firing devices, and general firing operations and techniques. The course provides students with important information concerning general tasks required to be successful. This course is based on a National Wildfire Coordinating Group (NWCG) course: S-234: Ignition Operations.

**Prerequisites:** FIRE F155.**Lecture + Lab + Other:** 1 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F202 Fire Protection Hydraulics and Water Supply**

3 Credits

Offered As Demand Warrants

Provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and their application to analyze and solve water supply problems.

**Prerequisites:** MATH F055 or placement into MATH F105; FIRE F101.**Lecture + Lab + Other:** 3 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F203 Hazardous Materials Chemistry I**

3 Credits

Offered As Demand Warrants

Basic fire chemistry relating to most categories of hazardous materials including problems of recognition, reactivity and health risks encountered by fire fighters.

**Prerequisites:** Satisfactory demonstration of basic chemistry knowledge (pretest).**Lecture + Lab + Other:** 3 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F206 Building Construction for Fire Protection**

3 Credits

Offered Spring

The components of building construction that relate to fire and life safety. Focuses on fire fighter safety. Includes elements of construction and design of structures shown to be key factors when inspecting buildings, preplanning fire operations and operating emergencies.

**Prerequisites:** FIRE F101 or employment or experience in related field, such as fire protection, insurance, construction architecture, or engineering.**Lecture + Lab + Other:** 3 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F207 Hazardous Materials Technician**

3 Credits

Offered As Demand Warrants

Advanced information for protection and safety of personnel engaged in response and field cleanup of hazardous materials and substances at the hazardous materials technician level (EPA course #165.15).

**Lecture + Lab + Other:** 3 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F210 Fire Administration I**

3 Credits

Offered Fall

Organization and management of a fire department and the relationship of government agencies to the fire service. Emphasis on fire service leadership from the perspective of the company officer.

**Prerequisites:** FIRE F101.**Lecture + Lab + Other:** 3 + 1 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F212 Building and Fire Codes**

3 Credits

Offered As Demand Warrants

Introduction to life safety aspects of the uniform building code. Emphasis on uniform fire code for fire inspections on existing buildings, flammable liquids, hazardous materials and special processes. Preparation for the uniform fire code exam administered by the International Conference of Building Officials.

**Prerequisites:** FIRE F101; FIRE F206.**Lecture + Lab + Other:** 3 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F214 Fire Protection Systems**

3 Credits

Offered Fall

Features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers.

**Prerequisites:** FIRE F101.**Lecture + Lab + Other:** 3 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F215 Advanced Hazardous Materials Technician**

3 Credits

Offered As Demand Warrants

Provides increased hands-on skills for personnel with a hazardous materials technician rating. Emphasis will be placed on task proficiency in spill containment, plugging, patching, diking and valve shut-offs on large commercial transporters. Stabilization of large and small chlorine leaks and decontamination will also be covered.

**Prerequisites:** FIRE F207.**Lecture + Lab + Other:** 2 + 2 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F216 Methods of Instruction for Emergency Services Training**

3 Credits

Offered As Demand Warrants

Skills necessary to instruct emergency service courses including adult education techniques, classroom setup, use of audiovisual equipment, presentation, and evaluation methods of students and instruction.

**Lecture + Lab + Other:** 3 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F217 Hazardous Materials Technician Refresher**

1 Credit

Offered As Demand Warrants

Information and skills required for protection and safety of personnel engaged in response and field cleanup of hazardous materials and substances at the hazardous materials technician level.

**Prerequisites:** FIRE F206 or equivalent with certification that may not be expired for more than one calendar year.**Lecture + Lab + Other:** 1 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F218 Advanced Rescue Practices**

3 Credits

Offered As Demand Warrants

Provides instruction in four of the most common rescue situations that fire departments encounter in an Interior Alaska rescue: vehicular extrication, rope rescue, confined space rescue and ice/water rescue. Class stresses basic knowledge and hands-on experience. All students are required to wear a complete set of fire department-approved protective clothing (turnout gear). Limited quantities are available for loan through the Emergency Services Program Coordinator.

**Prerequisites:** EMS F170; FIRE F117.**Lecture + Lab + Other:** 3 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F219 Rapid Intervention Company Operations**

3 Credits

Offered As Demand Warrants

Provides firefighters with the knowledge and skills necessary to work safely and respond appropriately to life-threatening situations. Includes rapid intervention team building skills, self rescue techniques and the knowledge to handle a mayday or high risk/threat situation. Completion of course will qualify students for the state of Alaska certification testing process. All students are required to wear full firefighter personal protective equipment. Limited quantities of PPE are available for loan through the program coordinator.

**Prerequisites:** FIRE F117, FIRE F131, FIRE F133, FIRE F135 and FIRE F137; or department head approval.**Lecture + Lab + Other:** 2.5 + 1 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F220 Emergency Services Safety, Health and Survival**

3 Credits

Offered Fall

Introduces basic principles and history related to national firefighter life safety initiatives, focusing on needed cultural and behavior changes throughout the emergency services. Course examines current and future issues in emergency services including close calls, near misses, line of duty deaths, risk management, mitigation and personal and organizational accountability.

**Prerequisites:** FIRE F101, FIRE F131, FIRE F133, FIRE F135 and FIRE F137.**Lecture + Lab + Other:** 3 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F232 Firefighter II**

3 Credits

Offered Spring

Advanced technical study of fire alarms, communications, fire behavior, self-contained breathing apparatus, rescue, safety, ladders, fire hose, nozzles and appliances, fire streams, water supplies, sprinklers, overhaul and inspections. Limited quantities are available for loan through the emergency services program coordinator. An eight-hour personal protective equipment and self-contained breathing apparatus safety orientation must be completed in order to participate in live fire exercises.

**Prerequisites:** FIRE F131; FIRE F133; FIRE F135; FIRE F137.

**Special Notes:** All students are required to wear a complete set of fire department approved protective clothing (turnout gear).

**Lecture + Lab + Other:** 2 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F244 Firefighter Internship, Series 4**

1 Credit

Offered As Demand Warrants

Practical experience in fire operations and training by arrangement through local fire departments.

**Prerequisites:** FIRE F145 or FIRE F147.

**Lecture + Lab + Other:** 0 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F246 Firefighter Internship, Series 5**

1 Credit

Offered As Demand Warrants

Practical experience in fire operations and training by arrangement through local fire departments.

**Prerequisites:** FIRE F244.

**Lecture + Lab + Other:** 0 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F248 Firefighter Internship, Series 6**

1 Credit

Offered As Demand Warrants

Practical experience in fire operations and training by arrangement through local fire departments.

**Prerequisites:** FIRE F246.

**Lecture + Lab + Other:** 0 + 2 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F251 Wildland Firefighter IV**

3 Credits

Offered As Demand Warrants

This course is intended to meet the training needs of the first line leadership positions in wildland fire suppression. Lessons are designed to produce student proficiency in the performance of duties from initial dispatch through demobilization back to the home unit. Topics include operational leadership, preparation and mobilization, assignment preparation, size up, developing a plan of action, risk management, entrapment avoidance, safety and tactics, offline duties, demobilization, and post incident responsibilities. Portions of the course will be blended learning with some lessons online. This course is based on National Wildlife Coordinating Group (NWCG) courses: S-200 Initial Attack Incident Commander; S-230 Crew Boss (Single Resource).

**Prerequisites:** FIRE F151; WFS F153 and FIRE F155.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F252 Wildland Fire Prevention I**

3 Credits

Offered As Demand Warrants

Designed to enhance basic skills and knowledge of personnel assigned responsibilities for wildfire prevention. This course teaches sound wildland fire observations and scene of origin protection practices that enable first responders to identify and preserve fire cause evidence. Introduction to Alaskan wildland fire prevention statutes, regulations and enforcement procedures.

**Prerequisites:** FIRE F151.

**Special Notes:** This course is based on National Wildfire Coordinating Group (NWCG) courses: P-101 Fire Prevention Education I; FI-110 Wildland Fire Observation and Origin Protection.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F253 Wildland Fire Investigation I**

3 Credits

Offered As Demand Warrants

Consistent fundamentals and technical knowledge base needed for the wildland fire origin and cause determination investigator (INVF). The concepts taught will include recognizing and conducting origin and cause determination, preservation of evidence and documentation, which will aid an investigator to perform at a professional level on a national basis.

**Prerequisites:** FIRE F151; FIRE F155 and FIRE F252.

**Special Notes:** This course is based on a National Wildlife Coordinating Group (NWCG) course: FI-210 Wildland Fire Origin and Cause Determination.

**Lecture + Lab + Other:** 3 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F254 Incident Finance and Administration**

1.5 Credits

Offered As Demand Warrants

Incident business management objectives, including duties and responsibilities of the Incident Command System (ICS) finance/administration section relating to management practices and programs. Parts of this course are presented in a blended learning format. This course is based on a National Wildfire Coordinating Group (NWCG) course: S-260 Interagency Incident Business Management.

**Lecture + Lab + Other:** 1.5 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F255 Wildland Fire Behavior II**

2 Credits

Offered As Demand Warrants

This course will give students an understanding of the determinants of fire behavior through studying input datum for fire (weather, slope, fuels and fuel moisture). Operation of fire behavior prediction tools, assessing and selecting proper inputs, interpreting the results in terms of rate of spread, fire line intensity, potential for extreme fire behavior; and documentation processes. This course is based on a National Wildlife Coordinating Group (NWCG) course: S-390 Introduction to Wildland Fire Behavior Calculations.

**Prerequisites:** FIRE F155.

**Lecture + Lab + Other:** 2 + 0 + 0

**Grading System:** Letter Grades with option of Plus/Minus

**FIRE F256 Wildland Fire Planning and Multiple Use Management**

3 Credits

Offered As Demand Warrants

Fire management and its role in a multiple use resource program. Includes prescribed and wildfire practices, environmental concerns, management goals and objectives, and pre-fire planning.

**Prerequisites:** FIRE F151; WFS F153; FIRE F155.**Lecture + Lab + Other:** 3 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F257 Wildland Fire Helicopter Management**

3 Credits

Offered As Demand Warrants

A comprehensive examination of interagency government helicopter operations to prepare the student to perform the job of Helicopter Manager. Topics covered include: agency policy, flight manuals, helicopter capabilities and communications, flight following, fueling procedures, contract administration and pay documents, pre and post-use inspections, risk management and required safety procedures, general and specialized helicopter operations such as qualifying landing areas, transportation of passengers and cargo, initial attack operations, and sustained support to incidents. This course is based on a National Wildlife Coordinating Group (NWCG) course: S-372 Helicopter Management.

**Prerequisites:** WFS F157.**Lecture + Lab + Other:** 2 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F258 Wildland Fuels Management**

3 Credits

Offered As Demand Warrants

Use of fire as a resource management tool. Natural and prescribed fire planning. Development and procedures to meet management objectives, components for conducting safe, prescribed burning.

**Prerequisites:** FIRE F151; FIRE F155; FIRE F262; WFS F153.**Lecture + Lab + Other:** 3 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F262 Wildland Fire Tactical Operations**

2 Credits

Offered As Demand Warrants

This course is intended to produce proficiency in the selection and implementation of wildland fire suppression tactics necessary at the strike team/task force leader level. Topics include fire line construction, use of hand tools, heavy equipment, water and engines, firing operations and using combinations of resources. This is an advanced level course for trained and experienced wildland firefighters. This course is based on a National Wildland Coordinating Group (NWCG) course: S-336 Tactical Decision Making in Wildland Fire.

**Prerequisites:** FIRE F155 and FIRE F251.**Lecture + Lab + Other:** 2 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F264 Incident Business Practices**

1.5 Credits

Offered As Demand Warrants

Incident business procedures required in entry level staff positions including financial management of a large complex incident. This course is based on a National Wildlife Coordinating Group (NWCG) course: S-261 Applied Interagency Incident Business Management.

**Prerequisites:** FIRE F254.**Lecture + Lab + Other:** 1.5 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F270 Wildland Fire Command Function**

3 Credits

Offered As Demand Warrants

An overview of the command function including use of single and unified command, roles and responsibilities of the incident commander and staff, development and implementation of strategic decisions, providing information to the media, and managing the incident from initial attack of small, non-complex fires to larger, more complex initial attack suppression organizations dealing with escape attack situations.

**Prerequisites:** FIRE F151; FIRE F155; FIRE F252; WFS F153.**Lecture + Lab + Other:** 3 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F276 Prescribed Fire I**

2 Credits

Offered As Demand Warrants

Provide a thorough familiarization with the Interagency Prescribed Fire Planning and Implementation Procedures Reference Guide. Students will develop the knowledge and skills needed to prepare a prescribed fire plan, in accordance with the guide, ready for technical review and approval. This course is based on a National Wildlife Coordinating Group (NWCG) course: RX-341 Prescribed Fire Burn Plan Preparation.

**Prerequisites:** FIRE F255.**Lecture + Lab + Other:** 2 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F277 Prescribed Fire II**

2 Credits

Offered As Demand Warrants

This course is designed to introduce students to the tools and techniques used to perform in the role of a prescribed fire burn boss. It leads the students through the duties and responsibilities associated with the position including evaluation and implementation of a prescribed fire plan. This course is based on a National Wildlife Coordinating Group (NWCG) course: RX-301 Prescribed Fire Implementation.

**Prerequisites:** FIRE F251; FIRE F255.**Lecture + Lab + Other:** 2 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus**FIRE F278 Prescribed Fire III**

2 Credits

Offered As Demand Warrants

This course is designed to provide students with the knowledge and skills necessary to recognize and communicate the relationships between basic fire regimes and first order fire effects, the effects of fire treatments on first order fire effects, and to maintain fire treatments to achieve desired first order fire effects. This course is based on a National Wildlife Coordinating Group (NWCG) course: RX-310 Introduction to Fire Effects.

**Prerequisites:** FIRE F255.**Lecture + Lab + Other:** 2 + 0 + 0**Grading System:** Letter Grades with option of Plus/Minus