Fire Science (FISC)

FISC 101  S,F  3 credits
INTRODUCTION TO FIRE PROTECTION  RE
Studies the history and development of fire service as well as safety and security movements. Identifies general fire hazards and their causes and how to apply fire protection principles.
Prerequisite: None

FISC 105  F  3 credits
FUNDAMENTALS OF FIRE PREVENTION  RE
Studies fundamentals of fire inspection standards and techniques of evaluation, identification of hazards, and making practical recommendations. Students write reports and conduct on-site inspections of building to locate hazards and recommend improvements. Students study fire prevention and education programs and conduct presentations.
Prerequisite: None

FISC 109  F  3 credits
FIRE SERVICE SAFETY  RE
Studies firefighter health and safety as it relates to Washington State. Emphasizes day-to-day health and safety of department members. Addresses standards and regulations, the safety officer’s role, accident prevention and investigation, record keeping. Structural, EMS, hazardous materials, and wild land emergencies will be addressed.
Prerequisite: None

FISC 110  F  3 credits
FIRE SCIENCE I  RE
Studies characteristics and behavior of fire, fundamental physical laws and chemical reactions occurring in fire and fire suppression. Analyzes factors contributing to fire: its cause, rate of burning, heat generation and travel, by-products of combustion, fire confinement, control, and extinguishing.
Prerequisite: None

FISC 111  F  10 credits
BASIC FIRE FIGHTING SKILLS  RE
Studies basic tools, procedures, techniques and safety precautions utilized by the fire fighter during fire ground operations based on nationally recognized professional standards and Washington State “basic fire fighter” training requirements.
Prerequisite: None

FISC 125  Sp  5 credits
FIRE SERVICE RESCUE  RE
Studies a variety of procedures, equipment, and tools utilized by emergency rescue personnel. Student will become familiar with building search, auto extrication, rope rescue, and water rescue.
Prerequisite: FISC 111 or instructor permission.

FISC 129  Sp  3 credits
EMERGENCY INCIDENT MNGT  RE
Studies the emergency incident management (IMS) process as it applies to the fire service at the “fire company” level. Emphasis to include basic command structure and components, incident safety considerations, personnel accountability, and application of the management process to a variety of emergency situations.
Prerequisite: None

FISC 170  W,Sp  8 credits
EMERGENCY MEDICAL TECHNICIAN B  RE
Provides skill development in recognition of symptoms of illness and injuries, and in proper emergency care problems. Includes proficiency tests and evaluation sessions. Prepares students to take the state certification examination for EMT B.
Prerequisites: MEDA 101 or BTEC 181 or concurrent enrollment with a C or better.

FISC 205  W  3 credits
FIRE INVESTIGATION AND CAUSE DETERMINATION  RE
Studies burning characteristics of combustibles. Interprets clues and burn patterns leading to point of origin. Identifies incendiary indications, sources of ignition and materials ignited, and how to preserve the fire scene evidence.
Prerequisite: None

FISC 206  Sp  3 credits
HAZARDOUS MATERIALS  RE
Reviews basic chemistry as it applies to fire technology. Studies the identity of hazardous material by color, symbol, and marking. Covers recommended practices for storage and handling of solids, liquids, and gases, and studies fire control methods for these materials. Meets federal standards for awareness and operations level.
Prerequisite: None

FISC 207  W,Sp  4 credits
FIRE APPARATUS AND PUMPING EQUIPMENT  RE
Provides an introduction to various fire pumps and their operation. Reviews operating principles and construction of various types of equipment, and covers preventive maintenance and troubleshooting. Also introduces ground flow and friction loss considerations, and pump discharge pressure calculations.
Prerequisite: None

FISC 210  W  3 credits
BUILDING CONSTRUCTION FOR FIRE PROTECTION  RE
Offers knowledge and skills in the various construction features of buildings. Includes structural features affecting fire spread and building collapse, the effect of fire on materials, fire stops and ratings. Use of blueprints and plans to understand building features and pre-fire planning is emphasized.
Prerequisite: None
FISC 215  F,Sp  3 credits
FIXED SYSTEMS AND EXTINGUISHERS  RE
Studies portable extinguisher equipment, fire alarm and
detection systems, sprinkler systems and standpipes,
protection systems for special hazards, explosion
release, ventilated systems, inert atmosphere and static
bonding.
Prerequisite: None

FISC 220  3 credits
WILDLAND FIREFIGHTER II  RE
Trains persons in the basic skills of wildland fire
fighting. Examines wildland fire behavior, fire control
tactics, operation of fire pumps, standards for fire fighter
safety and survival, and an introduction to the Incident
Command System. Students completing this course
will be qualified to suppress wildland fire under close
supervision.
Prerequisite: None

FISC 224  Sp  3 credits
FIRE SERVICE INSTRUCTOR I  RE
Provides a basic understanding of the implementation
strategies for specific fire service curricula and
instructional methodology used in the workplace. Each
student will demonstrate the knowledge of and the
ability to deliver instruction from prepared materials, and
effectively critique lesson deliveries of their peers.
Prerequisite: None

FISC 230  1 credit
WILDLAND FIREFIGHTER II REFRESHER  RE
Refreshes basic skills of wildland fire fighting. Examines
wildland fire behavior, fire control tactics, operation of
fire pumps, standards for firefighter safety and survival,
and an introduction to the Incident Command System.
Students completing this course will be qualified to
suppress wildland fire under close supervision.
Prerequisite: FISC 220 or equivalent.

FISC 255  Sp  3 credits
FIRE FIGHTING TACTICS AND STRATEGY  RE
Studies fire ground tactics and strategy, responses
and size-ups, protection of exposures, containment,
extinguishing, the command post, combined operations,
analysis and post-mortem evaluation, pre-fire surveys,
and planning.
Prerequisite: None