# FIRE SCIENCE TECHNOLOGY (FS)

FS100 Principles of Emergency Services 3 credits (3 lec hrs/wk)

This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; life safety initiatives.

This course may be taken 1 time for credit.

Course classification: CTE

# FS105 Firefighter Fundamentals I 4 credits (2 lec, 4 lec lab hrs/wk) Prerequisite(s): (FS100)

This course provides students with the knowledge, skills, and abilities necessary to become firefighters. Students will learn about topics that include firefighter safety and health, fire department communications, fire behavior, personal protective equipment, portable fire extinguishers, ropes, webbing, and knots, search and rescue, and emergency scene lighting. Students will receive comprehensive training in firefighting skills associated with these topics.

This course may be taken 1 time for credit.

Course classification: CTE

# FS110 Firefighter Fundamentals II 4 credits (2 lec, 4 lec lab hrs/wk) Prerequisite(s): (FS105)

This course provides students with the knowledge, skills, and abilities necessary to become firefighters. Students will learn about topics that include forcible entry, ground ladders, water supply, fire hose, and fire streams. Students will receive comprehensive training in firefighting skills associated with these topics.

This course may be taken 1 time for credit.

Course classification: CTE

# FS115 Firefighter Fundamentals III 4 credits (2 lec, 4 lec lab hrs/wk) Prerequisite(s): (FS100) or (FS110)

This course provides students with the knowledge, skills, and abilities necessary to become firefighters. Students will learn about topics that include fire control, tactical ventilation, loss control, and fire origin and cause determination. Students will receive comprehensive training in firefighting skills associated with these topics.

This course may be taken 1 time for credit.

Course classification: CTE

# FS120 Building Const Related to Fire Svc 3 credits (3 lec hrs/wk) Prerequisite(s): (FS100)

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

This course may be taken 1 time for credit.

Course classification: CTE

## FS125 Principles of Fire and Emergency S 4 credits (4 lec hrs/wk)

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.

This course may be taken 1 time for credit.

Course classification: CTE

FS180 Internship: Fire Science 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: CTE

## FS200 Strategy and Tactics 3 credits (3 lec hrs/wk)

Prerequisite(s): (FS100)

This course provides the principles of fire ground control through utilization of personnel, equipment, and extinguishing agents.

This course may be taken 1 time for credit.

Course classification: CTE

## FS205 Fire Prevention 3 credits (3 lec hrs/wk)

This course provides 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; fire and life safety education; and fire investigation.

This course may be taken 1 time for credit.

Course classification: CTE

# FS210 Hazardous Materials & Weapons of MD 3 credits (2 lec, 2 lec lab hrs/wk)

This course provides student with the knowledge, skills, and abilities necessary to become a hazardous materials first responder. Students will learn about topics that include identifying hazardous materials, types of hazards, routes of entry, terrorist attacks, and weapons of mass destruction. Students will receive comprehensive training in using the Emergency Response Guidebook, mitigating incidents involving hazardous materials, and decontamination operations.

This course may be taken 1 time for credit.

Course classification: CTE

## FS215 Legal Aspects of Emergency Services 3 credits (3 lec hrs/wk)

This course will address the federal, state, and local laws that regulate emergency services and include a review of national standards, regulations, and consensus standards.

This course may be taken 1 time for credit.

Course classification: CTE

# FS220 Fire Protection Systems 3 credits (3 lec hrs/wk)

Prerequisite(s): (FS105)

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.

This course may be taken 1 time for credit.

Course classification: CTE

## FS225 Prin of Fire & Emerg Service Admin 3 credits (3 lec hrs/wk)

Prerequisite(s): (FS100)

This course introduces the student to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer.

This course may be taken 1 time for credit.

Course classification: CTE

## FS280 CWE: Fire Science 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: CTE

## FS5239 NFPA Instructor I 3 credits (3 lec hrs/wk)

The course prepares the program participants for planning instruction using a variety of instructional methods teaching diverse learners and evaluating course outcomes. This course meets the competency standards Fire Service Instructor I certification.

This course may be taken 1 time for credit.

Course classification: CTE

## FS5246 NFPA Firefighter II 4 credits (4 lec hrs/wk)

Students completing this course have met the NFPA 1001 Standards for Certification as NFPA Firefighter IIs.

This course may be taken 1 time for credit.

Course classification: CTE

FS5263 NFPA Pumper Operator 2.50 credits (2 lec, 1 lec lab hrs/wk)

This course meets the national standard for vehicle driver/operator.

The course is designed to educate firefighters who are responsible for

operating fire apparatus with fire pumps. This course may be taken 1 time for credit.

Course classification: CTE

FS5276 S130/190 Wildland Firefighter Type 3 credits (3 lec hrs/wk)

Firefighters successfully completing this course will be qualified to suppress wildland fires under close supervision. This training is required for all personnel prior to certification as a firefighter (Type 2) under the national wildland qualification system.

This course may be taken 3 times for credit.

Course classification: CTE

## FS5678 Collapse of Burning Buildings 1 credit (1 lec hrs/wk)

Prerequisite(s): (FS105)

Structural collapse is one of the leading causes of firefighter deaths.

This course is disigned to warn firefighters how buildings collapse when destroyed by fire.

This course may be taken 1 time for credit.

Course classification: CTE

## FS9173 S-131: Adv Frftr Trg 0.50 credits

Prerequisite(s): (FS5276)

This course is suggested training for individuals who wish to become qualified in the first level supervision position of advanced firefighter/squad boss (FFT1) in wildland fire management.

This course may be taken 1 time for credit.

Course classification: CTE

# FS9175 Firefighter Safety 3 credits (2 lec, 1 lec lab hrs/wk)

Course is designed to explore numerous aspects of firefighter safety. Students will explore those safety hazards and possible mitigation techniques for ensuring their safety.

This course may be taken 1 time for credit.

Course classification: CTE

# FS9370 Rapid Intervention Teams-Fire 1.50 credits (1 lec, 1 lec lab hrs/ wk)

Prerequisite(s): (FS105)

The course will provide students with the skills necessary to perform as a member of a Rapid Intervention Team (RIT). The course is based on the 4-Phase Standard Operating Guideline that requires the use of locate, access, stabilize, and transfer procedures for the rescue of firefighters. This course may be taken 1 time for credit.

Course classification: CTE

FS9380 S215 Fire Ops Urban Interface 2 credits (2 lec hrs/wk)

Prerequisite(s): (FS5276)

This course is designed to meet the training needs for initial attack incident commanders (wildland suppression) and company officers (suppression) confronting wildland fires that threaten life, property, and improvements.

This course may be taken 1 time for credit.

Course classification: CTE

FS996Q Fire Science Driver 2 credits (1 lec, 1 lec lab hrs/wk)

This course is designed to provide firefighter student with concepts in emergency driving defensive driving Oregon laws/policies and vehicle maintenance. Students will also receive skills and knowledge to drive and maintain emergency vehicles.

This course may be taken 1 time for credit.

Course classification: CTE