Fire Science

FS 100

Introduction to Fire Service [RE] • 1.0 Credit

This course is designed to give students a broad understanding of the fire service in the United States. The course focuses on history, organization, and the primary components that make up the various forms of fire protection services in America today. This course is required for those students having no previous exposure to the fire service such as Tri-Tech Fire Science courses or IFSAC FF I certification.

FS 111

Fire Administration [RE] • 3.0 Credits

Management in the fire service explores the skills and techniques used by competent management in business, government, and voluntary organizations, with particular emphasis on their application to the fire service. Prerequisite: Completion of FS 100, FS 121, FS 131, FS 141, FS 151, FS 211, FS 231, FS 241, and FS 251, all with a 1.0 or better.

FS 121

Fire Tactics [RE] • 3.0 Credits

Discussion of basic firefighting tactics of company response, including size-up rescue, exposure, ventilation and fire problems, and tactics used.

FS 131

Introduction to Fire Inspections [RE] • 3.0 Credits

A course designed to give the new inspector or firefighter a basic concept of inspections that deal with fire hazards, authority to inspect, and how to conduct a pre-fire plan.

FS 141

Chemistry of Hazardous Materials [RE] • 3.0 Credits

This course is a survey of hazardous materials, their physical properties, chemical properties, and how they relate to emergency first responders who are called to manage events related to the release of hazardous materials. This course is intended for individuals who are majoring in Fire Science or who are enrolled in the Washington State Firefighter Apprenticeship program.

FS 151

Hazardous Materials for First Responders [RE] • 3.0 Credits

This course is a survey of hazardous materials, their physical properties, chemical properties, and how they relate to emergency first responders who are called to manage events related to the release of hazardous materials. This course in intended for individuals who are majoring in Fire Science or who are enrolled in the Washington State Firefighter Apprenticeship program.

FS 193

Fire Science Independent Studies [RE] • 4.0 Credits

A class used to explore new coursework or for a specific topic of special interest. Grade is pass/no credit.

FS 199

Special Studies • 1.0-15.0 Credits

A class used to explore new coursework.

FS 211

Building Construction [RE] • 3.0 Credits

This course is designed to give the firefighter an understanding of the basics of building construction as it pertains to the fire service. This class is designed to prepare the student for assessing construction types and weaknesses for structural firefighting.

FS 222

Fire Tactics II [RE] • 3.0 Credits

This course includes planning, implementing, and evaluating basic and advanced fire tactics at the command officer level. **Prerequisite: Completion of FS 121 with a 0.7 or higher.**

FS 231

Fire Protection Equipment [RE] • 3.0 Credits

This course is designed to give students a clear understanding of the principles and limitations of fire suppression and detection systems, and their role in fire department emergency operations.

FS 241

Fire Investigation [RE] • 3.0 Credits

This course includes methods of determining the area of fire origin, fire causes, fire spread, and the aspects of fire behavior; recognizing accidental and incendiary fires and securing and preserving evidence. Witness interrogation methods, arson laws, court procedures, and review of case histories are discussed.

FS 251

Fire Service Hydraulics [RE] • 3.0 Credits

This course is designed to give the firefighter an understanding of municipal water systems, principles of fluids, water in motion, formulas for calculating water flow and pressure, fire flow requirements, and basic fire stream calculations. This course prepares students, in part, for fire apparatus pump operations.

FS 293

Fire Science Independent Studies [RE] • 1.0-10.0 Credits

A class used to explore new coursework or for a specific topic of special interest. Grade is pass/no credit.

FS 299

Special Studies [RE] • 1.0–10.0 Credits

A class used to explore new coursework.