

Training for Safer Communities





Fire & Safety Division COURSE CATALOGUE 2000/2001



FIRE & SAFETY Division

COURSE CATALOGUE 2000/2001



Training for Safer Communities

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Two years have passed since the Fire and Safety Division of the Justice Institute of British Columbia produced its first catalogue of programs and courses. Since that time many achievements have occurred in areas of our training and educational offerings.

We now have graduates of the British Columbia Fire Fighter I Training Program and Fire Officer I of the Fire Service Leadership Diploma/ Certificate Program. A major expansion has occurred at our Maple Ridge Campus and includes an eleven-railcar derailment configuration that supports the Rail Tank Car Specialist Program and allows for sophisticated scenario-based training in the area of hazardous-material

response. There is a tower crane erected at the Maple Ridge Campus in support of the Technical High Angle Rope Rescue Training Program. We have had twelve of our courses accredited by the International Fire Service Accreditation Congress (IFSAC). Thousands of certificates of achievement and successful completion of courses and programs have been issued.

We take pride in sharing the success of our many students who work in a variety of areas within the fire, safety and emergency response communities. Our mission statement reflects our continuing dedication to our students and clients ...

"By working with our clients and others who share our principles and vision, the JI Fire and Safety Division will continue to provide training and educational products and services that support the needs of a diverse group of clients."

On behalf of all of us at the Fire and Safety Division, I will once again take this opportunity to thank you for your continuing support for our programs. We look forward to your feedback in order that we may continue to provide the high quality of programs that meet your needs.

p. Veles

John B. Vokes Director Fire and Safety Division

FIRE & SAFETY DIVISION

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FIRE & SAFETY DIVISION









General Information

FIRE & SAFETY DIVISION

The Justice Institute of B.C. is a post secondary institution dedicated to improving the quality of justice and public safety by developing and delivering training programs and offering educational services to professionals and the public. The Justice Institute Fire & Safety Division develops and delivers training in fire and safety.

The Justice Institute main campus is located in New Westminster at 715 McBride Boulevard. This modern facility is designed to accommodate the specialised needs of the JI clientele. The campus covers 170,000 square feet and includes an office block, classroom/simulation block, library, lecture theatre, cafeteria, gymnasium, indoor firearms range and media centre. Other features include the integration of an exterior courtyard area with an interior atrium.

The Fire & Safety Division main office is on the third floor of the office block.

JI Telephone Directory

General Inquiries	525-5422
Registration	528-5590
Finance & Administration	528-5500
Centre for Conflict Resolution	528-5608
Corrections & Community Justice Division	528-5531
Courts Academy	528-5567
Emergency Management Division	528-5790
Fire & Safety Division (Fire Academy) Fire & Safety Division (Fire & Safety Training Centre)	528-5657 462-1000
Instructional Media Development Centre	528-5600
Instructional Media Development Centre Library	528-5600 528-5599
Library	
Library Paramedic Academy	528-5599
Library	528-5599 528-5707

JI Mailing Address

Justice Institute of B.C. 715 McBride Boulevard New Westminster, BC V3L 5T4

Website: www.jibc.bc.ca

The JI Fire & Safety Division delivers programs and courses from two locations; the New Westminster Campus (*Fire Academy*) and the Maple Ridge Campus (*Fire & Safety Training Centre*). Please see maps on the following page.

The New Westminster Campus (*Fire Academy*) focuses on the training of fire department personnel through course offerings which include, but are not limited to, pre-employment fire fighter training, a fire fighter program, fire officer programs, instructor training, as well as customised training.

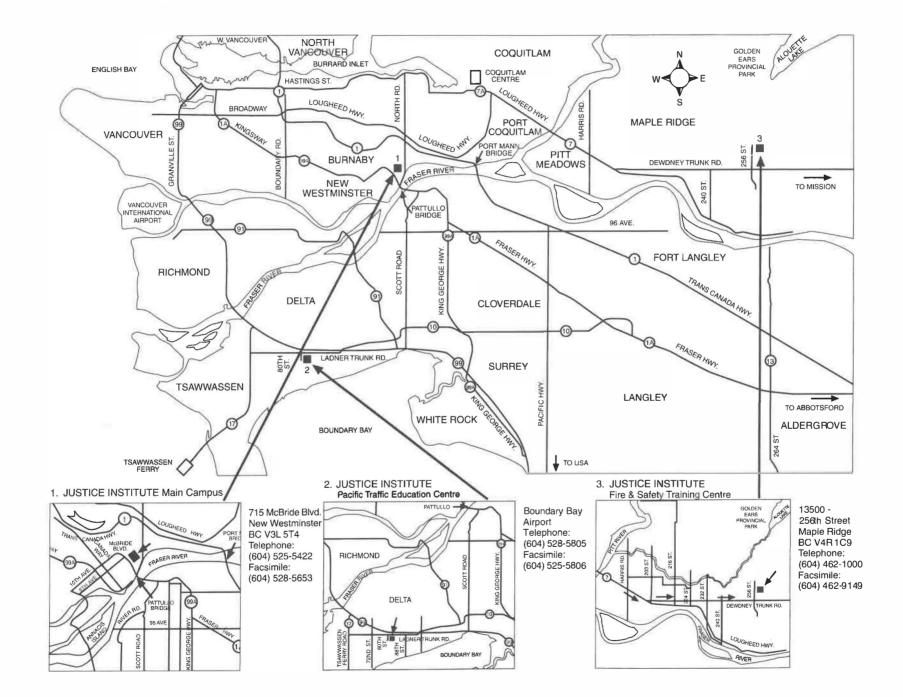
The Maple Ridge Campus (*Fire & Safety Training Centre*) delivers a wide range of training programs, from basic fire fighting to hazardous materials training and specialised programs developed to meet client needs. The programs focus on hands-on training, combined with classroom theory. Small class sizes ensure everyone participates in the learning process.

The training site is located 58 kilometres east of Vancouver. It includes training areas and props designed for a wide range of scenarios, such as the eleven-railcar derailment configuration, tower crane, high angle rescue, extinguisher training, live fire, haz-mat, and confined space rescue.

Location and Contact Information

Fire & Safety Division New Westminster Campus Fire Academy 715 McBride Boulevard New Westminster, BC V3L 5T4 Tel: (604)528-5657 Fax: (604)528-5660 email: fireacademy@jibc.bc.ca

Fire & Safety Division Maple Ridge Campus Fire & Safety Training Centre 13500 - 256th Street Maple Ridge, BC V4R 1C9 Tel: (604)462-1000 Fax: (604)462-9149 email: fstc@jibc.bc.ca



The Fire & Safety Division offers programs and courses to a wide variety of clients. For ease of use, we have divided this catalogue into three main sections: **General Information**, **Programs**, and **Courses**. The last two offer alphabetical listings of the training we offer at both campuses and elsewhere.

We have further categorized the Programs and Courses listings into three types based on the client market served: general public, fire service, and industry/marine. Not all of the courses offered are available to each category. Beside the course/program listing, we have used icons to designate each category. The icons used are as follows:



General Public

Fire Service



Industry/Marine

*

An asterisk [*] beside the listing title indicates the program/course is also offered on a CONTRACT, FEE-FOR-SERVICE basis. See "Contract Courses" below.

Please see page 22 for Summary of Programs and page 34 for Summary of Courses.

Course Site Flexibility

Courses can be delivered on site or at various locations as agreed upon if there is an appropriate number of students.

Services Offered

Contract Courses

In addition to the wide range of courses and programs listed in this catalogue, the Fire and Safety Division offers customised and site-specific courses to clients. We can adapt existing courses or design courses to meet client needs. All custom courses are designed in consultation with the client and reference any and all relevant standards or needs. Courses may be presented at the client's facility on a contract basis.

For further information on contract courses, contact the Fire and Safety Division, Maple Ridge Campus at (604) 462-1000 or the New Westminster Campus at (604) 528-5657.

Career Counselling

Career counselling is available for anyone interested in pursuing a career in the Fire Service. The hourly sessions are by appointment and a fee will be charged. Call 528-5657 for details and to make an appointment.

Training Materials for Purchase

The Fire and Safety Division offers a range of materials that support our programs.

The Fire and Safety Division is the BC distributor of International Fire Service Training Association (IFSTA) and Fire Protection Publications (FPP) materials. IFSTA and FPP support a wide range of training topics for fire, safety and industrial users. A catalogue of the training materials is available upon request.

Fire and Safety Division Publications:

Risk Management for the Fire Service, 2nd Edition. ISBN 0-7726-3985-X , 58 pages, Price \$25.00. This publication explores the legal aspects of liability and focuses on issues in the fire service and ways of preventing exposure to potential lawsuits.

Pumps and Pumping, 2nd Edition. ISBN 0-7718-9177-6, 72 pages, Price \$22.00. This manual explores the basic operating principles of a centrifugal pump as well as the parts, connections, valves, and gauges associated with it. A quiz is included at the end of each chapter.

For more information or to receive a catalogue and price list or to place an order, please call (604) 528-5657.

Library

Library and information services are provided to all members of fire departments. The service is accessible by mail or in person. If you have specific requests for information, contact the library directly. Borrowers are responsible for loss or damage to materials. A library card is not required.

The Library houses videos, slides, books and magazines on public safety and justice topics. Some of the topics include:

- Training
- Management
- Fire Behaviour
- Smoke and Ventilation
- Fire Investigation

- Apparatus and Equipment
- Disasters and Hazardous Materials
- Fire Prevention and Suppression
- Rescue and First Aid
- Marine Safety and Fire Fighting

Video catalogues are available from the library for a \$5.00 fee. Please make cheques payable to the Justice Institute when ordering your catalogue.

The monthly newsletter, *Library News*, listing new books and audio visual materials, is sent to fire departments.

The Library is open from 8:00 am to 5:00 pm on weekdays.

For further information contact the Library at (604) 528-5599; fax: (604) 528-5593 or email: library@jibc.bc.ca: or check out the library section of the JI website: www.jibc.bc.ca.

Distance Education

Some courses are offered in the distance learning format. These courses are identified as *self study* under the presentation section of the course description. Students will have telephone access to Fire & Safety Division instructors and are encouraged to use this service as it is an integral part of the course. Out of province students will have to pay long distance telephone charges.

The Distance Education Program for the Fire Service in the Province of British Columbia is a series of courses that allows fire fighters and officers to upgrade their knowledge through self study of learning materials provided to them in their own locality. This method allows students to work at their own pace. Students are encouraged to work at an accelerated pace in accordance with the schedules arranged with their own department support personnel, including fire department Liaison Officers (usually Chief Training Officer or designate) and Division instructors who make up an integral part of the program.

Several courses are available for certification. The courses are based on the qualifications established by the NFPA, and have been amended as necessary to reflect the needs of the BC Fire Service. Successful completion of a full program leads to certification at that level.

Student Information

If you are taking courses at the Maple Ridge Campus the following is important for you to note.

Clothing: For some courses you are advised to bring coveralls/work clothes and a change of clothes (natural fibres, no synthetics). Full protective clothing (where required) will be assigned to the student for the duration of the course. Please check when registering.

Beards: Most of our courses use self contained breathing apparatus (SCBA). Your face must be clean shaven where the SCBA mask fits. Moustaches are permitted only if they do not affect the seal of the SCBA face piece. This is a requirement of the Canadian Standards Association, Workers' Compensation Board and Transport Canada, Marine Safety.

Eye Wear: Prescription safety glasses may be worn with SCBA if they are in an approved holder that does not affect the seal of the SCBA.

Clean Up: Showers and soap are provided. Please bring your own towel.

Lunch: There is no cafeteria at our Maple Ridge Campus. Unless otherwise notified, please bring a lunch. Some courses include a lunch; please check when registering.

Parking: Parking is available at no charge. Follow the signs.

Accommodation: Many motels in the area offer discounts to students. Mention your student status when booking rooms. For information on accommodation in the area call the Maple Ridge Chamber of Commerce at (604) 463-3366.

Cancellation Policy for Maple Ridge Campus Courses: Registration fees are refundable provided we receive notification of cancellation *two weeks (10 working days) prior* to the course date. Refunds are subject to an administration charge.

For current schedule and fee information contact the New Westminster Campus (604) 528-5657 or Maple Ridge Campus (604) 462-1000, or on the JI website: www.jibc.bc.ca.

Fee Structure for Clients

Students enrolled in Fire & Safety Division programs are responsible for their travel, meals and accommodation* costs.

Fees:

•	Course Transcript Fee	\$ 5.00
	- One Day Course Transcript Fee	20.00
•	Certificate Fee (Program Completion)	30.00
•	Replacement of Certificate	50.00
•	Name Change on Certificate	50.00
•	Transfer of Credit Review	50.00
•	Photocopy of Certificate	10.00
•	Fire Fighter Module Exam Fee	5.00
•	Fire Fighter Practical Evaluation Fee	5.00
•	Additional copies of Course Catalogue	5.00
•	Basic Fire Fighter Certificate Subject Fee	TBA

All fees are subject to change.

*Student discounts are available at hotels in the area. Please check when registering for courses.

Registration

It's easy to register!

BY MAIL:	Justice Institute of B.C. 715 McBride Boulevard, New Westminster, BC V3L 5T4 Attn: Registration Office
BY PHONE:	(604)528-5590; TDD/TTY: (604)528-5655 (8:30 am - 4:00 pm, Monday to Friday)
IN PERSON:	Office Hours 8:30 am - 4:30 pm, Monday to Friday
BY FAX:	(604) 528-5653

Register Early:

Many courses fill quickly, so register early to avoid disappointment. Registrations are accepted on a first-come, first-served basis. *Registration cannot be completed until we receive full payment for the course(s).* No post-dated cheques will be accepted.

Tax Deduction:

You may deduct tuition fees from your taxable income if the total amount exceeds \$100 for the year. Income tax receipts will be issued in February for previous year courses.

Refunds:

Registration fees are refundable provided we receive notification of cancellation *one week (7 days) prior* to the course date. Refunds are subject to an administrative charge of \$25.00.

Transfers:

We must receive notification regarding transfer from one course to another *one week (7 days) prior* to the date of the course you are transferring from. Transfers are subject to an administrative charge of \$25.00.

Substitutions:

Course substitutions are welcome as long as the substituting participant has completed the course prerequisites. The substituting participant must communicate this to the Registration Office.

NSF Cheques:

A fee of \$15 applies to all cheques returned "NSF".

Course Cancellations:

A full refund of tuition fees will be issued for courses cancelled by the Justice Institute. The Institute is not responsible for participant's expenses (e.g. airline or hotel reservations) if a course is cancelled. The Institute reserves the right to cancel courses. We truly regret any inconvenience this may cause.

Confirmation of Registration:

Confirmation of registration is sent to students by mail. We are unable to confirm registration by fax. If you have questions regarding your confirmation, please contact a registration representative by telephone at (604) 528-5590.

Students with Disabilities:

The Justice Institute has received funds from the Ministry of Education, Skills and Training to provide support to students with disabilities attending courses at the Justice Institute. For further information on the support available, please contact Margaret Murphy, Student Services Advisor at (604) 528-5663 or TDD/TTY 528-5655.

First Nations Students:

Our First Nations Advisor is available to provide information and office support to First Nations students. First Nations Advisor Renee Nyberg-Smith can be contacted at (604) 528-5621. To obtain a brochure on First Nations services, please call (604) 528-5621.

Student Loans:

Student loans are available for the Career Fire Fighter Pre-employment Training Program only. Application forms are available from Margaret Murphy, Student Services Advisor at (604) 528-5663 or TDD/TTY 528-5655.

REGISTRATION FORM

Have you ever taken a course at the Justice Institute of B.C.? TYES NO Current date:					
If YES , Student Identity Number (if known):					
Provincial Education Number (if known)					
If NO , please provide us with the month/			a	-	
Gender: Male Female (for st		1	11		
	moved recently? If so, we need				
The followi	ng is my: 🗖 Work add	lress 🛛 H	lome address		
LAST NAME	FIRST NAME		MIDDLE NAME		
POSITION		ORGANIZATION			
STREET NAME AND ADDRESS					
СІТУ	PROVINCE	COUNTR	Y		
POSTAL CODE	EVENING OR HOME PHON	E.	DAY PHONE		
ARE YOU OF ABORIGINAL HERITAGE? INO					
DISABILITIES/SPECIAL REQUIREMENTS (PLEASE D	ESCRIBE):				
	lany of our courses ha				
Please read the course description	is in our calendar card	COURSE NO		COURSE FEE	
Note: Courses are GST-exempt. Fee payment should be submitted with this form. TOTAL FEE					
ENCLOSED IS MY COURSE FEE PAYMENT BY:					
Cheque or money order. Cheque issued by:					
□ MasterCard					
□ VISA					
Authorization Number					

Justice Institute of B.C., 715 McBride Boulevard, New Westminster, B.C. V3L 5T4 For registration only: phone (604) 528-5590; fax (604) 528-5653

Please use one registration form per student. Photocopy this form for use by each additional student.











Programs

Summary of Programs

Program Name (Not all of the courses offered are available to each category.	General Public	Fire Service	Industry/	* Contract
Beside the list, we have used icons to designate each category.)	T ubite	Jervice	Marine	Contract
BC Fire Fighter Program		~		
Career Fire Fighter Pre-Employment Training Program	V			
Distance Education Programs:				
Fire Service Leadership Diploma/Certificate		V		
Fire Prevention Inspector		V		
NFPA/JI Fire Inspector		V	~	
Instructor Training Programs				
Fire Service Instructor – Level I		~	~	
Fire Service Instructor – Level II		V	~	
Live Fire Scenario Instructor Workshop		V		V
Fire Service Leadership Diploma/Certificate - Classroom		~		
Others				
Aircraft Crash Rescue Awareness and Orientation		~		~
Road Sense Driving & Legal Issues	~	~	~	~

BC Fire Fighter Program



The BC Fire Fighter program is based on the BC Fire Fighter Standard.

The Fire & Safety Division will support the fire service by identifying curriculum and providing a system of examinations, checklists and recordkeeping.

To assist fire departments in managing training and evaluations, subjects which meet the standard have been broken into ten (10) modules. The recommended training manual for this program is the International Fire Service Training

Association (IFSTA) Essentials, Fourth Edition

The Fire & Safety Division is unable to project a time-frame for completion of the training necessary to achieve the training objectives for Fire Fighter I or Fire Fighter II as this is driven by the amount of time devoted to the training and evaluation which occurs at the fire department level.

For additional information on this program call (604) 528-5657.

Career Fire Fighter Pre-Employment Training Program

FIRE 101



Purpose of the Program

The purpose of the Career Fire Fighter Pre-employment Training Program is to prepare individuals to apply for positions in the fire service. The program is 12 weeks and is scheduled 5 to 6 times a year.

Admission Requirements

To gain admission into the program, students must go through a screening process. The screening process takes place three times a year. The screening process includes an Entry Fire Fighter Written Exam, Medical Exam, and Physical Performance Assessment. Admission/Information packages are available through the Registration Office of the Justice Institute giving detailed information about the steps students need to take to be admitted into the program. You can download the package from the JI website at www.jibc.bc.ca.

Applicants must meet all required qualifications for admission into the Career Fire Fighter Preemployment Training Program. The required and preferred qualifications are included in the Admission/Information Package.

Program Content

Students will be trained in all aspects of the BC Fire Fighter Standards Level I and II. in Hazardous Materials Response to the Operations Level and to First Responders Level III including Automatic External Defibrillators and Spinal Management. Students will also meet the National Fire Protection Association (NFPA) 1001 Level I and II Standard.

The Justice Institute of B.C. is accredited through the International Fire Service Accreditation Congress (IFSAC) to certify fire fighters in British Columbia.

Students will learn through theory, lectures, and practice drills, and will be examined on the following subjects:

- Automatic Sprinkler Systems
- Fire Department Organization •
- Fire Behaviour •
- Portable Extinguishers
- Fire Fighter Personal Protection Equipment •
- **Ropes & Knots**
- **Rescue & Extrication** •
- Forcible Entry

- Ventilation
- Ladders
- Water Supply
- Fire Streams
- Hose
- Fire Control
- Salvage and Overhaul
- Building Construction
- Fire Fighter Responsibility in Fire Cause Determination
- Ship Board Fire Fighting for the Land Based Fire Fighter

- Fire Prevention and Public Fire Education
- Fire Alarms and Communications
- First Responder Level III
- Automatic External Defibrillators
- Spinal Management
- Hazardous Materials Emergency Response Awareness Level
- Hazardous Materials Emergency Response
 Operations Level

For more information on this program call (604) 528-5657.

Distance Education Programs

Distance Education Programs for the Fire Service in the Province of British Columbia cover a series of courses that allow fire fighters and officers to upgrade their knowledge through self study of learning materials provided to them in their own locality.

Distance Education allows students to work at their own pace. Students are encouraged to work at an accelerated pace according to schedules arranged with their own department support personnel, including fire department Liaison Officers (usually the Chief Training Officer or designate) and Fire & Safety Division instructors, who make up an integral part of the program.

Support Personnel

Instructors

In each block the student's progress is guided and evaluated by a Fire & Safety Division appointed instructor. The instructor evaluates course assignments and block projects. The instructor informs the Division when the student is ready to write exams, as required.

Liaison Officers

The Fire Chief appoints a Liaison Officer to coordinate the delivery of the program within the Fire Department. The Liaison Officer (usually the Training Officer) provides support as necessary, supervises the writing of exams in the Fire Department, and maintains records in the department.

Materials

The student registers for a specific program or course, in consultation with the Liaison Officer. Each course contains the following:

- *Course units:* presented as a series of printed booklets, each containing objectives, instructional material, self-tests, practical exercises, and projects to be completed. There is a basic tuition fee for each course.
- *Support materials:* for Liaison Officer and instructors.

For more information on these programs call (604) 528-5657.

FIRE SERVICE LEADERSHIP DIPLOMA/CERTIFICATE

The Fire Service Leadership Diploma/ Certificate Program provides fire officers with opportunities to expand their overall knowledge of the fire service and to achieve certification to the Fire Officer I, II, III and IV levels NFPA 1021, BC Fire Officer Standard. All Fire Officer levels are accredited by the International Fire Service Accreditation Congress (IFSAC).

The program is for officers in Career Fire Departments, Volunteer Fire Departments and composite Fire Departments. It provides essential knowledge for supervision of fire fighters in fire stations, managing the operations of a fire station and department, and the necessary skills to manage emergency scenes.

The Fire Service Leadership Diploma/Certificate Program is offered primarily by distance education. However, specific programs such as Emergency Scene Management (Managing Company Tactical Operations), Fire Service Instructor, Incident Command, and Building Construction are delivered in a workshop format. Distance education, because of its flexibility, is particularly suitable for province-wide application. Students are able to remain in their regular work environment and can apply new skills and theories as they are acquired. This ensures that fire departments, which might not have staffing levels or budgets to support leaves of absence, can still participate in training opportunities. Distance learning is very cost effective as it saves having to have personnel to fill in for staff away on training.

For the distance programs, students receive course materials, read, write and submit assignments. Instructors will grade the assignments and comment on all student work. For the departments that wish to have their officers trained in a classroom, Fire Officer I is offered on a full classroom format at the JIBC, New Westminster Campus. See page 32 for more information

Fire Officer I



Station Officer: Dealing with People F105

This course introduces the fire officer to the origins of and future trends affecting fire protection in Canada, the formal organization of a fire department, theories of motivation, leadership, coaching, and discipline. 1.5 credits Tuition: \$225

Station Officer: Dealing with New Operations

F110

This course introduces the fire officer to the elements of managing an effective training function, water supply, public fire safety education program, managing in-service inspections, and first responder services. 1.5 credits Tuition: \$225

Fire Station Environment

F115

This course exposes fire officers to the pressures on a municipal organization, its budget process and liability concerns, the role of chief officers, employment equity, union management relations, and the balancing role a company officer must play between senior management and the union local. Students of volunteer departments will study methods of fund raising. This course also looks at methods of promoting change in the Fire Service.

1.5 credits Tuition: \$225

Emergency Scene Management (Managing Company Tactical Operations) F120

This workshop prepares the student for the responsibilities of the incident commander, to conduct the three phases of size up, to prepare for a logical expansion of an incident, to select the appropriate strategy based upon risk/benefit analysis and available resources, carry out (in a scenario) the six steps required to implement the tactical action model and the appropriate apparatus placement. The workshop also introduces the student to the applicable building codes, the indications of structural stability and instability, and the actions a fire officer must take to ensure fire fighter safety. (6 day workshop) 2 credits

Tuition:

\$675

Fire Service Instructor I

S101

This workshop will introduce the student to the techniques required to prepare and deliver a course from a prepared lesson plan. Students will be exposed to training aids and evaluation instruments and methods of establishing a proper learning environment. Students will also explore methods of record keeping. 1 credit

Tuition:

\$225



Fire Officer II

Fire Prevention Management

This course will introduce the student to management techniques useful in developing the fire prevention function within a fire department. As well, attention will be given to managing inservice inspections. Finally, the management of fire investigation will be explored. *3 credits*

Tuition Fee: \$225

Fire Suppression Management

F155

This course will introduce the student to the relationships among fire risks, fire flows, personnel requirements, and pre-fire plans. Emphasis will be placed on the planning necessary prior to the sounding of the alarm. Please note: this is not a course on incident command. *3 credits*

Tuition: \$225

Strategic Operations & Unified Command

F160

This workshop prepares the student to manage a major incident that might require a fairly complex command staff and a number of divisional officers reporting to the commander. (5 day workshop) 1.5 credits Tuition: \$675

Fire Service Instructor 2

This workshop exposes the student to the scheduling, budget, records and reports, and instructor evaluation requirements of a Training Officer. Fire Service Instructor 2 will explore the elements of instructional development, delivery, and course evaluations and test analysis. *1 credit*

Tuition: \$225

Fire Officer III



Communications: Study Skills F205

This course introduces adult learners to the teaching and learning expectations of the Justice Institute of B.C. It includes a review of writing skills, concentrating on how to write papers, and a discussion of effective study skill techniques for distance learners. *3 credits*

Tuition: \$225

Organizational Behaviour F210

This course examines some of the basic concepts and principles of management and public administration. It provides an approach to such processes as planning, organizing, and controlling. It will address issues such as delegation of authority and organizational design and motivation. *3 credits Tuition: *** \$225

Personnel Management in the Fire Service I

F215

This course emphasizes personnel selection and the impact of the expanding role of the career fire fighter. It also examines the recruitment and retention of volunteer fire fighters.

3 credit Tuition:

\$225

Fire Service Strategic Planning I

F220

This course will look at master planning as a concept, which ties together the diverse elements of a fire department into a viable fire service system. It will provide clear understanding of the principles and concepts of master planning and will help students apply these concepts in their department.

3 credits

Tuition: \$225

Municipal Finance

F225

This course examines the reasons for financial planning with particular application to the fire department budget. The budget cycle is examined and a brief introduction to public accounting is made. The module proceeds to examine sources of municipal revenue and the criteria to evaluate the effect of these sources on the community. The module ends with a more detailed presentation of municipal expenditures.

3 credits

Tuition: \$225

Incident Command

F230

This workshop examines the need for an organized approach to managing incidents, the laws and standard that require an organized approach to managing emergency incidents, the elements and components of an effective emergency management system, and evaluates your department's capabilities to implement an emergency management system.

1.5 credits Tuition:

TBA

Fire Officer IV

Fire Service Law

F250

This course introduces fire officers to principles of law. One emphasis is on tort law, particularly the lawsuits arising against fire departments. Another area of emphasis is criminal law as it applies to arson. *3 credits*

Tuition: \$225

Program Evaluation & Statistics

F255

This course is designed to help the student select research consultants who engage in comparative research, evaluation research or survey research for the fire service. The student is introduced to issues of research design and evaluation in the first lesson. The second lesson explores measures of central tendency and dispersion. The third lesson introduces simple correlation and regression. The final lesson introduces multiple regression. *3 credits*

Tuition: \$225

Government Organization & Structure F260

This course provides an overview of the three levels of government in Canada and analyzes their organizations and structures. Particular attention is paid to the relationship between parliamentary democracy and decision-making at each level of government.

3 credits Tuition: \$225

Personnel Management in the Fire Service II

F265

This course emphasizes the effect of critical incident stress on fire fighters, and the ways to address this problem. It also emphasizes labour management relations by focusing on the collective bargaining process and the administration of the collective agreement. *3 credits Tuition:* \$225



Master Planning II

F270

This course is a major planning project prepared under the direction of an instructor.

3 credits Tuition: \$225

Municipal Emergency Preparedness Plan

F275

This workshop exposes students to the elements of a Municipal Emergency Management Plan. The students will leave with an understanding of the Fire Service role in the Municipal Emergency Plan. 1 credit

Tuition:

TBA

City Management Workshop

F280

This workshop will cap the subjects covered in both Fire Officer III and IV. Students will be exposed to the trends facing city and municipal administration and how they affect the delivery of all municipal services, including fire protection. Students will hear first hand the expectations City Managers and Councils have of the fire service and fire department leaders in the future. Students will also work on case studies and advanced management planning and problem solving in a workshop session. 1.5 credits Tuition: TBA

The assignment of credit value for each course is under review.

All fees are subject to change.

For more information on these programs call (604) 528-5657.

FIRE PREVENTION INSPECTOR



Introduction to Fire Prevention

This course discusses the background, philosophy and purpose of legislative aspects of fire prevention. It provides an overview of fire prevention and specific information on the fire problem and fire prevention in British Columbia, building a framework for the more detailed and technical blocks to follow. Other topics include the principles and goals of fire prevention practice; history and evolution of fire prevention; elements of the fire problem; issues and trends in fire prevention; fire prevention agencies and legislation at the federal, provincial and local levels; and the role of the Fire Prevention Inspector.

Self study hours:	60
Tuition:	\$125

Basic Fire Science

FPI - 2

This course is an introductory study of basicchemical and physical principles underlying fireand dangerous goods behaviour. The course looksat such subjects as vapour pressure and density,ignition temperature, flash point, and flammablelimits, as well as other topics of concern topersonnel involved in fire prevention.Self study hours:40Tuition:\$125

Blueprint Reading for the Fire Service

This course familiarises the student with conceptsof reading building construction drawings at anoperational level. This information enables theFire Prevention Inspector to check that buildingplans conform to the appropriate codes, bylawsand regulations. The student learns to readarchitectural, plumbing, electrical, mechanical,and sprinkler piping blueprints.Self study hours:120Tuition:\$125

Elements of Life and Fire Safety

FPI - 4

This course forms a foundation for the technicalblocks that follow presenting detailed informationon life and fire safety concepts pertaining toegress design, building construction types,occupancies, and fire safety plans.Self study hours:60Tuition:\$125

Fire Protection Systems and Extinguishers

This course presents the basic types of fireprotection systems including sprinklers,standpipe and hose systems, fire pumps, specialextinguishing systems and portable fireextinguishers. The course offers a detailed studyof each system, its operation and application andoffers specific instructions on code requirementsand fire prevention inspection procedures.Self study hours:100Tuition:\$125

Signalling and Detection Systems

FPI - 6

This course presents an in-depth study of firealarm systems and the various types of heat,smoke, and flame detectors. The course alsooutlines code requirements for installing firealarms for each type of occupancy hazard andspecifies the inspection procedures.Self study hours:60Tuition:\$125

Water Supply Systems

FPI - 7

This course covers details of water supply systems for private fire protection, water flow in pipes and hydrants, and fire flow requirements. Water supply systems covered include gravity tanks, pressure tanks and fire pumps. This course focuses on the operation of each system, code requirements, and inspections. *Self study hours:* 60

Delj study nouis.	00
Tuition:	\$125

Building Systems and Hazards

FPI - 8

This course presents the various services and systems that provide power, environmental control and convenience for a building. The course material provides the Fire Prevention Inspector candidate with a broad knowledge of fire hazards and fire protection associated with electrical systems and appliances, air conditioning and ventilation, heating systems, cooking equipment, materials and waste handling, housekeeping, and storage systems. Each unit concludes with specific guidance on code requirements and how to inspect target building systems. Self study hours: 60

Self study hours: 60 Tuition: \$125

Hazardous Materials

FPI - 9

This course gives the student an understanding of the duties and responsibilities of a Fire Prevention Inspector regarding hazardous materials, as set out in the Fire Services Act. It describes the classification of hazardous materials, their identification and the hazards they pose. It also outlines the responsibilities of other authorities in this area, as well as procedures for co-operating to ensure safe handling, use and storage of these materials.

Self study hours:60Tuition:\$125

Flammable & Combustible Liquids and Compressed & Liquefied Gases

FPI - 10

As a supplement to the preceding course, this course concentrates on the two most important hazardous material classifications. It gives the student an understanding of their characteristics, their specific fire and explosion hazards, and the regulations under the British Columbia Fire Code governing their handling, storage, and use. It describes procedures for inspection for leaks in containers and transfer systems and for abatement of fire hazards associated with leaks and spills, as well as describing the role of other agencies having jurisdiction.

Self study hours: 60 Tuition: \$125

Fire Prevention Practices

FPI - 11

This course focuses on the practice of fire prevention on a day-to-day basis and the application of fire prevention theory and technical principles to the fire problem in the community. It concludes the in-field part of the course by examining the specific fire prevention activities carried out by the Fire Prevention Inspector. Topics covered include: fire prevention inspections; code enforcement methods; fire safety plans; public education; fire cause determination: duties of a Local Assistant to the Fire Commissioner (LAFC); legal remedies; and judicial aspects of fire prevention activities such as evidence and testimony.

Self study hours: 60 Tuition: \$125

Fire Prevention Workshop

FPI - 12

This workshop provides hands-on practice inspecting fire detection systems, extinguishing systems, and buildings. Prereauisite: FPI-1 through FPI-11 Location: Various Duration: 3 days Tuition: \$300

A Certificate of Achievement will be awarded upon completion of this program.

For more information on these programs call (604) 528-5657.

NFPA/JI Fire Inspector

NFPA/II Fire Inspector - I Program NFPA1021-1

The Justice Institute has partnered with the NFPA to deliver the Fire Inspector I course. The goals of this course are to:

- Enhance professionalism within the fire • inspection industry
- Recognize and provide evidence of • competence as related to NFPA 1031
- Ensure proficiency in the use of codes and standards

This course is in three phases:

Phase I: Preparation for a Written Examination This can be done in two ways - either by a 40hour classroom session, or by self-study assignments.

Phase II: The Written Examination

This four-hour examination is designed to evaluate a student's knowledge of fire inspection principles and code application at the level of NFPA Fire Inspector I. The examination is provided by and marked by IFSTA. The Justice Institute is responsible for administration and proctoring of the examination.

Phase III: The Practicum

If successful in the written examination, students are eligible to continue to the Practicum phase. This is designed to ensure that an individual has experience in their particular field prior to becoming certified. The student is provided with workbooks and checklists for thirteen target occupancies, of which they must select seven (but must include a sprinklered facility and a commercial kitchen facility). Once completed, the checklists are forwarded to the NFPA via the Justice Institute for review and acceptance.

All BC applicants register through the Fire & Safety Division. Upon successful completion of the course, students receive a joint NFPA/Justice Institute certificate. The International Fire Service Accreditation Congress (IFSAC) accredits this course and successful students receive an IFSAC seal on the certificate. This course is also available in distance education format.

Tuition:

Certification:

TBA

Certificate of Achievement (NFPA/IIBC) Accredited by IFSAC (International Fire Service Accreditation Congress)

For information on this program call (604) 528-5657.



Instructor Training Programs

Fire Service Instructor - Level I



FSI - I

This is a 32-hour Fire Academy accredited course with emphasis on instructional and evaluation methods and techniques that can be used to present skills and information from prepared materials. This course meets Level I of the National Fire Protection Association (NFPA) 1041 (1996 ed.) standard and the BC Fire Service Instructor I standard, by providing the instructor with the knowledge and ability to:

- deliver instruction effectively from a prepared lesson plan, including instructional aids and evaluation instruments.
- adapt lesson plans to the unique requirement of the students and authority having jurisdiction.
- organize the learning environment so that learning is maximized.
- meet the record-keeping requirements of authority having jurisdiction.

Distance Education Component: Prior to attending the classroom session, the student spends approximately 16 hours reviewing and preparing materials. This includes reading and completing the provided student workbook, and assembling prepared materials from their own Fire Department.

Classroom Component: Having reviewed and prepared pre-course materials, the students participate in a 16-hour classroom session, where they adapt the prepared materials for delivery.

16

16

\$225

Self study hours:	
Workshop hours:	
Tuition:	
Certification:	

Certificate of Achievement Accredited by IFSAC (International Fire Service Accreditation Congress)

Fire Service Instructor - Level II



FSI - II

This is a 42-hour Fire Academy accredited course with emphasis on program management, lesson development and implementation of instruments for the evaluation of subordinate instructors. This course meets the Level II of the National Fire Protection Association (NFPA) 1041 standard (1996 ed.) and the BC Fire Service Instructor II standard.

Distance Education Component: Prior to attending the classroom session, the students spend approximately 22 hours reviewing and preparing materials. This includes reading and completing the provided Student Workbook and assembling prepared materials from their own Department.

Classroom Component: Having reviewed and prepared pre-course materials, the students participate in a 20-hour classroom session, where they adapt the prepared materials for delivery and make major presentations. They also learn to perform evaluations of other instructors.

Self study hours	22
Workshop hours	20
Tuition:	\$225
Certification:	
Certificate of Achie	evement
Accredited by IFSA	AC (International Fire
Service Accreditati	ion Congress)

Live Fire Scenario Instructor Workshop



This workshop comprises four days of intensive practical application. It enables the student to design and deliver training programs within a fire department. Also included are preparation and evaluation of checklists and developing and writing test questions, as well as Risk Management for the Training Officer. This workshop involves activity requiring candidates to be physically fit.

Activities will cover all areas of fire service training and are appropriate for personnel in suppression, fire prevention, dispatch and public education. It can be adapted for others as needed.

Location:	Various
Duration:	4 days
Tuition:	\$495
Certification:	
C	

Certificate of Achievement

For information on these programs call (604) 528-5657.

Fire Service Leadership Diploma/Certificate – Classroom

See page 25 for program description

Fire Officer I - Classroom



This course is directed at developing the knowledge and skills required to manage and lead in the fire service, handle the responsibility of command, and carry out the initial response to an incident.

Students will attend 2 days and 1 day a week over a 15 week period. Fire Officer I - Classroom will be offered in the Fall of 2000 and the Spring of 2001.

Fire Officer II - Classroom



This course is now in the development stage. The course will be offered in the Spring of 2001.

For information on these programs call (604) 528-5657

Others

Aircraft Crash Rescue Awareness and Orientation

This is a two-day program designed for structural fire department personnel who may be called upon to provide suppression/control to an aircraft incident. Topics include airframe familiarization, aircraft construction, aircraft systems, extinguishing agents, fire fighting and rescue procedures and tactics, brake fires, communications, biological hazards, and specialty aircraft. This course can be preceded by a sitespecific audit in order to have the training geared to the specific hazards that are or may be present.

For more information regarding the scope, availability and cost of this program, contact TLC Fire Services Inc. Tel/Fax: (604) 274-0016

The Fire and Safety Division provides certification for this program following successful completion of a written exam.

Road Sense Driving & Legal Issues



The Pacific Traffic Education Centre (PTEC) at the Justice Institute of B.C. offers a combined Road Sense Driving & Legal Issues course designed for drivers of all emergency vehicles. This course complements the Emergency Vehicle Operation (EVO) course offered by the Fire & Safety Division and addresses the "Emergency Vehicle Driving Regulations" introduced in April 1998.

"Legal Issues" deals with the legal aspects of operating emergency vehicles, as well as the limitations and disadvantages presented to drivers due to the type of vehicles used. Human Perception of Emergency Vehicles is a block of this component which was previously not addressed. Vehicle Acceleration and Retardation is presented in a manner consistent with the EVO course, but further explains relativity and the potential for danger. The "Road Sense Driving" component deals with collision prevention and is delivered in a video interactive format. Total course presentation time is 7 hours and there is a written examination.

This combined course is now available for presentation on-site at all departments. For more information, please contact: Al Lund, (604) 528-5805 or Ed D'Aoust,(250) 675-3448











Courses

Summary of Courses

Course Name (Not all of the courses offered are available to each category.	General	Fire	Industry/	* Contrac
Beside the list, we have used icons to designate each category.)	Public	Service	Marine	Contrac
Atmospheric Monitoring – Level I	~	V	~	~
Atmospheric Monitoring – Level II	~	~	V	~
Auto Extrication - Level I	V	~	V	~
Auto Extrication - Level II	~	V	V	~
Basic Fire Science	~			
Basic Orientation for New Departments		~		
Confined Space Awareness		V	~	~
Confined Space Entry and Rescue - Complete	~	~	V	~
Confined Space Rescue - Refresher		V	~	~
Emergency Vehicle Driver Training		~	~	~
Emergency Vehicle Operation		V	~	~
Fall Protection		V	V	~
Fire Department Incident Safety Officer		V	V	V
Fire Safety & Extinguisher Training	~		V	~
Fire Safety at Work	i i	V	V	
Fire & Structural Integrity	~	V	V	~
General Physics	~	~		
Hazardous Materials Emergency Response - Awareness	~	~		V
Hazardous Materials Emergency Response - Operations	~	V	V	V
Hazardous Materials Emergency Response - Technician	V	V	~	V
Hazardous Materials Emergency -Spill Control	_	V	V	V
Heavy & Tactical Team Rescue – Awareness & Operations Level	· ·	~	V	V
Industrial Fire Fighter - Awareness			V	
Industrial Fire Fighting - Level I	V		V	
Industrial Fire Fighting - Level II	V		V	V
Introduction to the Fire Service - Part I	· ·			
Introduction to the Fire Service - Part II	~			
Introduction to the Fire Service - Part III	V			
Introduction to Incident Command		V	V	
Live Fire - Level I		V	~	V
Live Fire - Level II		v	V	~
Live Fire - Level III		V	V	~
Live Fire – Level IV	1	V	V	~
Live Fire Special		V	V	~
Pumps & Pumping	~	V	V	~
Rail Tank Car Specialist	~	V	V	~
Refinery Fire Fighter - Level I & II		•	V	V
Shipboard Fire Fighting for the Land Based Fire Fighter	V	V	V V	~
		V	~	V
Shipboard Fire Fighting for the Land Based Fire Fighter - Awareness		v v	~	V
Situational Leadership	_	V	~	V
Strategies & Tactics	~	V	~	V
Technical Math	V V	V V		
Technical Rope Rescue - Awareness	V V	V	<i>V</i> <i>V</i>	
Technical Rope Rescue - Operations Technical Rope Rescue - Technician	~	V	~	

Atmospheric Monitoring - Level I*



This course is designed for individuals who are required to operate atmospheric monitoring instruments, either in an industrial application or as emergency personnel responding to hazmat or confined space emergencies. The familiarization and theory of operation of several types of instruments is covered in detail. Hands on laboratory activities allow the students to conduct air sampling using several instruments on various chemicals.

Prerequisites:

None

Presentation:

1 day - Classroom lectures and hands on practical exercises

Location:

Maple Ridge Campus or client site *Certification:*

Certificate of Attendance

Contact:

Information (604) 462-1000 Registration (604) 528-5590

Atmospheric Monitoring - Level 11*



This one-day course builds on the theory and practical activities of Atmospheric Monitoring Level I. Additional laboratory activities allow students to take readings with monitoring equipment and interpret the data to assist in formulating strategies to mitigate an incident. The care, maintenance and calibration of instruments is also discussed in detail.

Prerequisites:

Atmospheric Monitoring - Level I *Presentation:*

1 day - Classroom lectures and hands on practical exercises

Location:

Maple Ridge Campus or client site *Certification:*

Certificate of Attendance

Contact:

Information (604) 462-1000 Registration (604) 528-5590

Auto Extrication-



FS100

Level 1*

This first level familiarizes the student with the tools, techniques, and safe victim extrication techniques at motor vehicle accidents (MVAs).

Prerequisites:

Able to vertically lift 75 pounds

Presentation:

1 day – Classroom lectures and hands on practical exercises

Location:

Maple Ridge Campus or client site

Certification:

Certificate of Attendance

Contact:

Information (604) 462-1000 Registration (604) 528-5590

Auto Extrication-Level II*



FS101

This course introduces the student to scene management and the Incident Command System (ICS). Scenario based training will give the students realistic experience, challenging the student to apply required skills and knowledge from Level I.

Prerequisites: Auto Extrication – Level I Presentation: 2 days – Classroom lecture and scenario based training Location: Maple Ridge Campus or client site Certification: Certificate of Achievement

Contact:

Information (604) 462-1000 Registration (604) 528-5590

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Basic Fire Science

DE00 (Distance Ed) NC02 (Classroom)

This course is designed for fire service personnel but is also applicable to non-fire service personnel who need a fundamental understanding of fire and flammable materials, and to members of the general public with an interest in this safety area. The course provides an introductory study of basic chemical and physical principles underlying fire and dangerous goods behaviour in emergency situations. Topics include vapour pressure and combustion, elements of fire suppression, and general methods of fire control. This course will be offered in classroom format if there is a sufficient demand. Basic Fire Science can be offered at other colleges around the Province.

Prerequisites:

None

Presentation:

40 Self Study hours or six 2 hour classroom sessions

Location:

New Westminster Campus Certification:

Certificate of Achievement Contact:

> Information (604) 528-5657 Registration (604) 528-5590

Basic Orientation For New Departments



This course is designed to assist new volunteer fire departments in establishing safe and effective practices and procedures. Basic instruction is given on subjects including fire behaviour, selfcontained breathing apparatus, hose and nozzle handling, pumps and water supplies, search techniques, and fire ground organisation. Local fire department equipment and resources are used.

The course is offered to newly formed volunteer fire departments who have been recognised by the Office of the Fire Commissioner and have been issued a fire department code.

A minimum equipment list is required to conduct the course:

• ULC rated pumper (minimum 420 IGPM);

- capability to supply pumper capacity either from an in-ground water system or a portable water system;
- 2 ½" attack lines with at least two constant flow nozzles;
- 1 ½" attack lines with at least two constant flow nozzles;
- adequate self-contained breathing apparatus to satisfy Workers' Compensation Board requirements (at least four complete units with four spare cylinders);
- approved personal protective equipment for 10 fire fighters;
- call-out system to alert the fire department in the event of an emergency.

Prerequisites: None Presentation: 2 ½ days - Classroom sessions and practical exercises Location: Local fire department Certification: None Contact: Information (604) 528-5657

Confined Space Awareness*



This one day course is based on the Workers' Compensation Board (WCB) Rules and Regulations (Part 9) for all users groups. The awareness program is designed to ensure workers have knowledge and understanding of the importance of safe work procedures in their confined space and hazardous locations. Included in this program are hazard assessment low, medium and high; roles of responsibilities of attendant; personnel protective equipment and rescue responsibilities. The course is scheduled upon client request.

Prerequisites: None Presentation: Classroom lecture and field exercises Location: Maple Ridge campus or client site Certification: Certificate of Achievement Contact: Information (604) 462-1000

Confined Space Entry and Rescue - Complete*



FS800

The Justice Institute of B.C. and Canadian Airlines Technical Training department have developed a Confined Space Entry and Rescue program that meets all the guidelines set forth by COSH, the Occupational Safety and Health Administration of the U.S. (OSHA), Workers' Compensation Board (WCB) and NFPA 1670. Through classroom lectures and field exercises, material safety data sheets, permits and other documentation are examined and used. Students are expected to participate fully in all exercises using monitoring equipment, self-contained breathing apparatus, harnesses and hoisting systems.

Prerequisites:

None

Presentation:

4 days – Classroom lectures and field exercises

Location:

Annacis Island or client site *Certification:*

Certificate of Achievement

Contact:

Information (604) 462-1000 Registration (604) 528-5590

Confined Space Rescue -Refresher*



This challenging 2 day course is designed for students from industry and the fire service. Upon completion of the course students will be competent in all aspects of all equipment and procedures to properly effect a confined space rescue. The course is designed for students who have a basic understanding of atmospheric monitoring, industrial hygiene, or rope rescue techniques. The first day includes confined space awareness, hazard assessments and responsibilities, basic rope rescue procedures, victim packaging, atmospheric monitoring, SCBA and supplied air respirator training. On the second day students will apply the techniques and skills acquired from day one in vertical and horizontal confined space rescue scenarios.

This course is also recommended as a refresher for students who require annual skills maintenance training as per WCB. The course is scheduled upon client request. Prerequisites: None Presentation: 2 days – Classroom lectures and field exercises Location: Annacis Island or client site Certification: Certificate of Achievement Contact:

Information (604) 462-1000

Emergency Vehicle Driver Training*



This one-day course combines fire apparatus hands-on driver training and classroom theory. Training is conducted at the Boundary Bay Airport which is a restricted and controlled training site. The course is designed to introduce students to the practical driving requirements of Chapter Two of NFPA 1002 standard. This program focuses on defensive driving techniques, vehicle reference points, and the legal aspects of Section 122 of the Motor Vehicle Act. The course is scheduled upon client request.

Prerequisites:

Class 5 drivers license with air brake endorsement

Presentation

1 day - Classroom and hands on practical *Location*:

Boundary Bay Airport, Delta *Certification*:

Certificate of Achievement

Contact:

Information (604) 462-1000

Emergency Vehicle Operation*



This course is designed to educate and evaluate Driver/Operators in the use of Fire Department Pumping Apparatus. It is accredited by IFSAC and meets the NFPA 1002 Standard. Students will receive interactive training in preventative maintenance, vehicle maneuvering, driving/operating, water supply, relay pumping, foam production and drafting. A written and practical evaluation is required to ensure NFPA Standards are achieved. Successful students will have an appropriate mix of theoretical knowledge and practical skills to ensure the apparatus and personnel get to the scene safely and that the apparatus is utilized to its fullest potential. This program is designed to be delivered in house by department instructors. Fire and Safety Division Evaluators will conduct evaluations. The course is scheduled upon client request.

Prerequisites:

Basic knowledge of pumps and hydraulics *Presentation:*

In house instruction/Fire & Safety Division evaluation

Location:

Client site

Certification:

Certificate of Achievement,

IFSAC NFPA 1002

Contact:

Information (604) 462-1000

Fall Protection*



This four-hour course trains students in the fundamentals of fall protection and the safe use and limitations of personal fall protection equipment. Other areas covered include fall restraint and fall arrest anchor points, safety belts, harnesses and lanyards, and lifelines. This course has been designed in accordance with Workers' Compensation Board (WCB) Regulations. The course is scheduled upon client request.

Prerequisites: None

Presentation:

Classroom lecture

Location:

Maple Ridge Campus or client site *Certification:*

Certificate of Achievement

Contact:

Information (604) 462-1000

Fire Department Incident Safety Officer *



FS304

This interactive two-day course focuses on the roles and responsibilities of an Incident Safety Officer as described in the NFPA 1521 standard.

Emphasis is placed on assisting the student in developing decision-making skills, through the recognition of specific hazards and conditions at a scene that would affect the safety of emergency personnel and the public.

Prerequisites:

Experienced fire fighters or industrial fire brigade members Presentation: 2 days - Classroom and interactive scenarios Location: Maple Ridge Campus or client location Certification: Certificate of Achievement Contact: Information (604) 462-1000

Fire Safety & Extinguisher Training*



FS001

This course will explain fire behaviour, the fire tetrahedron, extinguisher selection and application. It will also touch on fire safety at work and proper safety procedures to follow in the event of a fire. The course has valuable information for employees of service stations, school districts, hospitals, hospitality and transportation industries, long term care facilities, etc.

Prerequisites: None Presentation: 4 hours - Classroom lecture and 'live fire' practical Location: Maple Ridge Campus or client site Certification: Certificate of Attendance Contact: Information (604) 462-1000 Registration (604) 528-5590

Fire Safety at Work



DE02 (Distance Ed) NC06 (Classroom)

This course has been designed in the distance education format and developed in co-operation with the Open College component of the Open Learning Agency. Course materials explore the nature of fire, common fuels, and ignition sources; hazards for each building type; fire prevention, fire drills, and using portable extinguishers; and a fire safety plan. After completing this course, students will be able to conduct basic fire prevention inspections, educate other employees on safe ways to respond to fire, lead fire drills, and prepare a full fire safety plan for any organisation. Students are required to submit four written projects and pass a multiple choice exam to complete the course.

The course will be offered in classroom format if there is sufficient demand. Fire Safety at Work can be offered at other Colleges around the B.C.

This course is not designed for professional or volunteer fire service personnel.

Prerequisites: None Presentation: 40 Self Study hours or six 2 hour classroom sessions Certification: Certificate of Achievement Contact:

Information (604) 528-5657 Registration (604) 528-5590

Fire and Structural Integrity *



This one-day course is offered to individuals who require a better understanding of how structures react under fire conditions. Concepts include common construction methods, fire growth and fire spread in structures, effects of fire on common building materials, and building collapse identifiers and strategies.

Prerequisites: None Presentation: Classroom lecture and demonstrations Location: Maple Ridge Campus or client site Certification: Certificate of Attendance Contact: Information (604) 462-1000

Registration (604) 528-5590

General Physics

DE06

General Physics familiarises the student with basic concepts of physics at a practical level. The topics include the physical phenomena of heat, motion, electricity, magnetism, light, sound, and radioactivity. Included in the course is a unit on the SI system of measurement with fire service related application and exercises. After completing the course students will have a more in-depth understanding of the principles of fire and combustion. The course will be offered in classroom format if there is sufficient demand and can be offered at other colleges around the Province.

Prerequisites:

Suggested - Basic Fire Science or background in science Presentation: 40 Self Study hours or six 2 hour classroom sessions Location: New Westminster Campus Certification: Certificate of Achievement Contact: Information (604) 528-5657 Registration (604) 528-5590

Hazardous Materials Emergency Response – Awareness*



FS200

This course is accredited by IFSAC with compliance to NFPA 472. The course covers practical, defensive response to hazardous materials emergencies. Personnel safety, hazard assessment and notification are practised in response to simulated incidents. It is recommended for employees of process industries, members of fire departments and anyone involved in the transportation and handling of hazardous material.

Prerequisites: None Presentation: 2 days - Classroom lecture and field exercises Location

Maple Ridge Campus or client site *Certification*:

Certificate of Achievement IFSAC NFPA 472

Contact:

Information (604) 462-1000 Registration (604) 528-5590

Hazardous Materials Emergency Response – Operations*



FS210

This course is accredited by IFSAC with compliance to NFPA 472 standard. Through scenario based training students respond to hazmat incidents while wearing personal protective equipment including SCBA (selfcontained breathing apparatus). Emergency response plans are implemented using the Incident Command System. The students will successfully demonstrate decontamination set up and procedures during scenario based training.

Prerequisites:

Awareness Level Presentation: 5 days – Classroom lectures and field exercises Location:

Maple Ridge Campus or client site *Certification:*

Certificate of Achievement IFSAC NFPA 472

Contact:

Information (604) 462-1000 Registration (604) 528-5590

Hazardous Materials Emergency Response – Technician*



FS220

This course is in conformance with NFPA 472. The technician level utilizes scene management and the ICS to safely mitigate the hazardous materials incident. Advanced scenario based training will be applied utilizing maximum level PPE including Level A suits. Prerequisites: Operations Level Presentation: 4 days – Classroom lectures and field exercises - including one night scenario Location: Maple Ridge Campus or client site Certification: Certificate of Achievement Contact: Information (604) 462-1000 Registration (604) 528-5590

Hazardous Materials Emergency Response – Spill Control*



This course focuses on emergency response procedures to hazardous materials spills. The course will give the student the basic skills necessary to respond safely, identify the hazard and perform various spill control techniques. This course can be customised to meet the client's requirements. The course is scheduled upon client request.

Prerequisites: None Presentation: Customised, including classroom lecture and field exercises Location: Maple Ridge Campus or client site Certification: Certificate of Attendance Contact: Information (604) 462-1000

Heavy & Tactical Team Rescue - Awareness & Operations Level *

FS495

In response to the huge demand for a new concept in special rescue training the JI Fire and Safety Division is introducing the Heavy & Tactical Team Rescue Program. Rope rescue, confined space rescue, and trench rescue will be the core modules of this exciting program. Team integrity and team efficiency concepts will be the central focus of the training. Students are required to be in excellent physical and mental condition as aspects of the program will challenge even experienced rescuers. The mandatory prerequisite shall be unparalleled selfmotivation and desire to work within a serious team and interactive learning environment. Under-motivated participants, or those who detract from safety and learning concepts of training will be asked to leave with a full refund before or by the end of day two. Students must provide own gloves, helmet, eye protection, long sleeve shirts, pants, flashlight and steel toed boots.

Prerequisites: None Presentation: 6½ days Location: Maple Ridge Campus Certification: Certificate of Achievement Contact: Information (604) 462-1000 Registration (604) 528-5590

Industrial Fire Fighter -Awareness



At the conclusion of this two-day program, the successful student will have the basic knowledge and skills required to become a valuable member of an incipient level Fire Brigade. Course content consists of fire extinguisher theory and practical evolutions, and self-contained breathing apparatus (SCBA), theory and practical evolutions. Instruction on fire extinguishers involves live fire in controlled settings. The course is scheduled upon client request.

Prerequisites: None Presentation: 2 days - Classroom lectures and field exercises Location: Maple Ridge Campus Certification: Certificate of Achievement Contact:

Information (604) 462-1000

Industrial Fire Fighting -Level I



Upon successful completion of this 5-day course, the participant will have the knowledge and skills required to be a competent member of an Industrial Fire Brigade Response Team. Course content includes: identification of fire hazard considerations, local regulations and brigade organization, fire behaviour and chemistry, hose systems, safety principles, PPE utilization, identification of storage container characteristics, search and rescue, fire detection and alarm systems, ladders, salvage and overhaul. The course meets the NFPA 600 standard requirements.

Prerequisites: None Presentation: 5 days – Classroom lectures and field exercises Location: Maple Ridge Campus Certification: Certificate of Achievement Contact: Information (604) 462-1000 Registration (604) 528-5590

Industrial Fire Fighting -Level II*



FS435

Upon successful completion of this 4-day course, the participant will have the knowledge and skills required to be a valuable member of an advanced Industrial Fire Brigade Response Team. Course content includes brigade organization and ICS, ventilation, fire behaviour and safety principles, fixed protection, fire detection and alarm systems, hose systems and foam. The course meets the NFPA standard 600 requirements.

Prerequisites:

Industrial Fire Fighting – Level I *Presentation:*

4 days – Classroom lectures and

live fire scenario training

Location:

Maple Ridge Campus

Certification:

Certificate of Achievement *Contact:*

Information (604) 462-1000 Registration (604) 528-5590

Introduction to the Fire Service -Part I



FS002

This course allows students to explore the possibility of a career in the fire service. Over a weekend, fire service professionals will present topics relevant to the fire service. Topics may include: Career Planning, Physical Testing for the Fire Service, Safety and Equipment, Fire Prevention Inspection, Dangerous Goods, Fire Department Perspective, Critical Incident Stress, and Fire Service Organisation. Enrolment is limited.

Prerequisites: None

Presentation:

1 evening plus 2 days -

Classroom & practical sessions

Location:

New Westminster Campus or provincial college

Certification:

Letter of Attendance

Contact:

Information (604) 528-5657 Registration (604) 528-5590

Introduction to the Fire Service -Part II



FS003

This course gives participants an opportunity to learn the basic roles and responsibilities of a fire fighter. Supervised use of extinguishers on live fire, and search and rescue techniques while wearing full personal protective equipment and maneuvering fire streams with charged hose lines are some of the highlights of this informative hands on program.

Prerequisites:

Introduction to the Fire Service – Part I *Presentation*:

2 days – Classroom lectures and hands on practical

Location:

Maple Ridge Campus *Certification:*

Certificate of Attendance

Contact:

Information (604) 462-1000 Registration (604) 528-5590

Introduction to the Fire Service -Part III



This course allows participants the opportunity to further utilize the skills acquired in Introduction Level II. SCBA, search procedures and fire streams will be reviewed. Students will respond in full protective gear to live fire scenarios. Course content will include fire behaviour, search and rescue, and fire suppression techniques. Students will learn the importance of teamwork as various tasks are performed under the direction of an instructor during live fire scenarios.

Prerequisites:

Introduction to the Fire Service – Part II Presentation: 2 days – Classroom lectures and hands on practical Location: Maple Ridge Campus Certification: Certificate of Attendance Contact: Information (604) 462-1000 Registration (604) 528-5590

Introduction to Incident Command



The course is designed to introduce the elements of an Incident Command System and an accountability system to an individual fire department or a group of fire departments involved in mutual aid. The workshop format will assist participants in developing systems that will address the specific needs of the department or group of departments. This is done through lecture, discussion, and practical application. This course can be presented over 2 or 2 ½ days depending on the department's needs.

Prerequisites: None Presentation: 2 ½ days - Classroom and practical application using a model town Location: Local fire department facilities Certification: None Contact: Information (604) 528-5657



Live Fire - Level I*



FS440 (Maple Ridge / Nanaimo)

A fire fighter completing Level I will have the appropriate mix of theoretical knowledge and practical skills and techniques to function effectively and safely as an integral member of a fire fighting team when engaged in fire suppression activities. Participants will develop the following practical skills and techniques for structural fires, interior/exterior attacks and ventilation.

This course is in conformance with NFPA 1001, and BC Fire Fighter Standard, Fire Fighter I.

Prerequisites:

Confirmation from the Department Fire Chief or supervisor on competency in the following subjects: safety and orientation, ladders, fire streams, fire hose and appliances, fire behavior, SCBA, ventilation and rescue

Presentation:

2 days – Classroom and live fire exercises *Location:*

Maple Ridge Campus, Nanaimo Training Centre or North Okanagan Regional District Training Centre

Certification:

Certificate of Achievement *Contact:*

Information (604) 462-1000 Registration (604) 528-5590



Live Fire - Level II*

FS441 (Maple Ridge / Nanaimo)

A fire fighter completing this level will develop practical skills and techniques to extinguish and control the following: an exterior combustible liquids fire of at least 1000 sq. ft. (9m²) using a foam fire stream; a fire in an elevated location within a structure (e.g. upper level, attic); a hidden fire within a structure (e.g. within walls, crawl spaces); a fire involving energized electrical components; a fire involving a flammable gas cylinder; a fire in a below grade or other location requiring initial attack from above.

This course is in conformance with NFPA 1001, and BC Fire Fighter Standard, Fire Fighter II.

Prerequisites: Live Fire Level I Presentation: 2 days – classroom lecture and field exercises Location: Maple Ridge Campus, Nanaimo Training Centre or North Okanagan Regional District Training Centre Certification: Certificate of Achievement Contact: Information (604) 462-1000 Registration (604) 528-5590

Live Fire - Level III*



FS442

This level is designed to enhance the skills, knowledge and safety of the fire fighter. The course introduces the fire fighter to working in the role of a fire officer.

Prerequisites:

Live Fire Level II; Senior Fire Fighter *Presentation:*

2 days – Classroom lectures and field exercises

Location:

Maple Ridge Campus

Certification:

Certificate of Achievement

Contact:

Information (604) 462-1000 Registration (604) 528-5590

Live Fire - Level IV*



FS444

This level is designed to enhance the safety of fire suppression crews at a fire scene. Participants will apply the Incident Command System (ICS) using passport accountability to live fire scenarios. The Incident Commander will size up emergency scenes and formulate strategic goals and tactical objectives. Fire fighter teams will be evaluated on the skills, suppression techniques and communication they display on a fire ground scene. Prerequisites: Live Fire Level III; Company Officer or thorough knowledge of incident command, passport accountability and strategies and tactics Presentation: 2 days – Classroom lectures and field exercises Location: Maple Ridge Campus Certification: Certificate of Achievement Contact: Information (604) 462-1000 Registration (604) 528-5590

Live Fire Special*



The objective of this course is to design live fire training scenarios which meet the specific needs of the individual Fire Department or Industrial Brigades. This scenario based training incorporates the client's Operating Guidelines and suppression techniques used by a Fire Department or Industry.

Prerequisites:

Confirmation from the Department Fire Chief on competency in the following subjects: safety and orientation, ladders, fire streams, fire hose and appliances, fire behaviour, SCBA, ventilation and rescue

Presentation:

Customised

Location:

Maple Ridge Campus, Nanaimo Training Centre or North Okanagan Regional District Training Centre

Certification:

Certificate of Attendance

Contact:

Information (604) 462-1000

Pumps and Pumping*



FS449

In this course the student will receive hands on training in the use of vehicle mounted pumps. Through classroom instruction combined with hands on training students will learn: vehicle maintenance; field hydraulics; driver responsibilities. The student will be challenged with a variety of pumping scenarios. Prerequisites: Valid drivers license with Air Brake Endorsement Presentation: 4 days - Classroom lecture and practical exercises Location: Maple Ridge Campus or client site Certification: Certificate of Achievement Contact: Information (604) 462-1000 Registration (604) 528-5590

Rail Tank Car Specialist* 🚺 🕅 🗂

This advanced program is for emergency response professionals who respond to train derailments where hazardous materials are involved or who require in-depth understanding of a rail emergency. The course is five days (45 hours) of scenario based training combining classroom instruction with hands-on practice.

Students will learn: tank car anatomy (different types of tank cars), valves and possible problems; damage assessment (a systematic approach); special procedures such as transfers, grounding and bonding, flaring, capping, leak sealing and valve repairs; Incident Command System (ICS) with team organization including roles and responsibilities. This includes an overview, a review of the BC Emergency Response Management System (BCERMS) and development and implementation of a site safety plan in response exercises.

Prerequisites:

Hazardous Materials Emergency Response -Operations

Presentation:

5 days – classroom lectures and field

exercises- including one night scenario *Location:*

Maple Ridge Campus

Certification:

Certificate of Achievement *Contact:*

Information (604) 462-1000 Registration (604) 528-5590

Refinery Fire Fighter -Level I & II*



Level I: A review of fire theory and behaviour, classes of fire, extinguisher use and plant emergency procedures is followed by field exercises with extinguisher or foam. Individual and team exercises are performed. A classroom review of BLEVE hazard is followed by field exercises on propane fires.

Level II: A review of SCBA, ICS and team response to fires is followed by field exercises on propane, gasoline (flange fires) and diesel fires. Students use extinguishers, in-line foam, hoses and wheeled units while responding in full turnout gear (including SCBA). Opportunity is given for team leaders to control their members during exercises under the instructor's supervision.

The course is scheduled upon client request.

Prerequisites:

Level I - Letter of recommendation from manager or supervisor

Level II – Refinery Fire Fighter - Level I *Presentation*:

1 day - Classroom lecture and field exercises *Location:*

Maple Ridge Campus

Certification: Certificate of Attendance Contact:

Information (604) 462-1000

Shipboard Fire Fighting for the Land Based Fire Fighter*



FS480

This 4-day course is based on the NFPA 1405 standard with additional Canadian content. Through shipboard visits, case studies and lectures by the senior fire fighters and ship's officers, the course provides information about shipboard fire fighting resources and the most successful techniques used to fight major fires on vessels and in marine terminals including drydocks. Students will also have the opportunity to apply their knowledge and skills during practical exercises in a model port. Prerequisites: None Presentation: Classroom and ship visits Location: Maple Ridge Campus or client site Certification: Certificate of Achievement Contact: Information (604) 462-1000 Registration (604) 528-5590

Shipboard Fire Fighting for the Land Based Fire Fighter - Awareness*



This 2-day course is an introduction to the marine environment. Through shipboard visits and lectures by senior ship's officers, the course provides students with information about the unique resources as well as the unusual dangers associated with fires on board ships. This course is scheduled upon client request.

Prerequisites:

- None
- Presentation:

Classroom lecture and ship visits *Location*:

Maple Ridge Campus or client site

Certification:

Certificate of Attendance Contact:

Information (604) 462-1000

Situational Leadership



Situational Leadership teaches people in management and supervisory positions to master four leadership styles - Directing, Coaching, Supporting and Delegating - and when to use each style to get the job done the right way.

Situational Leadership will help develop leaders at all levels of an organisation by teaching them how to diagnose and decide which leadership style is the most effective Prerequisites:

None

Presentation:

2 days - Classroom lecture and table top exercises

Location:

New Westminster Campus or client site *Contact:*

Information (604) 528-5657

Strategies and Tactics*



Using video, computer simulation, and model towns, students will manage the attack and coordinate the suppression on several structure fires in buildings of various occupancies. This course is directed towards line fire fighters and officers. It addresses fire behaviour, scene management, ventilation techniques and methods of structural fire attack. The course objective is to incorporate fire control with an effective emergency scene management system. The course is scheduled upon client request.

Prerequisites:

Fire department personnel or Industrial clients Presentation: 2 days – Classroom theory and hands on practical Location: Maple Ridge Campus or client site Certification: Certificate of Attendance

Contact:

Information (604) 462-1000



Technical Math

DE05

This course presents the basic math skills needed for fire flow calculations, such as volume and surface area, and provides frequent opportunities to apply the information to practical situations. Units include whole numbers, fractions and decimals, percentages, averages, algebraic equations, powers and square roots, ratios and proportions, and measurements of length, area, and volume. The course will be offered in classroom format if there is sufficient demand and can be offered at other colleges around the Province.

Prerequisites:

Basic mathematical skills Presentation: 40 Self Study hours or six 2 hour classroom sessions

Location:

New Westminster Campus or provincial colleges *Certification:*

Certificate of Achievement

Contact:

Information (604) 528-5657 Registration (604) 528-5590

Technical Rope Rescue – Awareness Level*

FS410

The awareness level is designed to offer some basic skills to be applied to a technical rescue emergency. The course consists of both classroom and field instruction. Course content includes: ropes and knots, equipment familiarization, basic anchoring and rigging systems, self rappelling, pick-off and time transfer scenarios. Students will be given a written exam and a proficiency evaluation.

The course is in conformance to NFPA 1670 standard.

Prerequisites: None Presentation: 3 days - Classroom lectures and practical hands on exercises Location: Maple Ridge Campus or client site Certification: Certificate of Achievement Contact: Information (604) 462-1000 Registration (604) 528-5590

Technical Rope Rescue – Operations Level*



FS411

The operations level will include team building roles and responsibilities, victim packaging, lowering systems, mechanical advantage systems, and raising systems. Students will operate as an integral part of a team environment and will be directed and monitored by instructors acting as team leaders. Students will be given a written exam and proficiency evaluation.

This course is in conformance with the NFPA 1670 standard.

Prerequisites:

Technical Rope Rescue – Awareness Level *Presentation:*

4 days - Classroom lecture and practical exercises

Location:

Maple Ridge Campus or client site *Certification:*

Certificate of Achievement

Contact:

Information (604) 462-1000 Registration (604) 528-5590

Technical Rope Rescue – Technician Level*



FS412

The technician level will require students to demonstrate skills, knowledge and techniques for hazard recognition, equipment use and procedures necessary to safely and effectively coordinate, perform and supervise a technical rescue incident. The course consists mainly of field instruction and includes a variety of scenarios. Students will be given a written exam and proficiency evaluation.

This course is in conformance with the NFPA 1670 standard.

Prerequisites:

Technical Rope Rescue – Operations Level *Presentation:*

4 days - Classroom and practical exercises *Location:*

Maple Ridge Campus or client location *Certification:*

Certificate of Achievement

Contact:

Information (604) 462-1000 Registration (604) 528-5590









Mission Statement

FIRE & SAFETY Division

By working with our clients and others who share our principles and vision, the JI Fire and Safety Division will continue to provide training and educational products and services that support the needs of a diverse group of clients.











FIRE & SAFETY DIVISION

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