

7

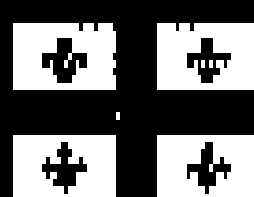
BUILDINGS AND PUBLIC WORKS

FIRE SAFETY TECHNIQUES

PROGRAM OF STUDY
5691

*VOCATIONAL and
TECHNICAL
EDUCATION*

020801
8499001

Québec 

FIRE SAFETY TECHNIQUES

PROGRAM OF STUDY

5691

(1130)
Rue Marie-Guyart, 28^e étage
Québec (QC) G1R 5A5

© Gouvernement du Québec
Ministère de l'Éducation, 1999 — 98-1196

ISBN 2-550-34228-3

Legal Deposit — Bibliothèque nationale du Québec, 1999

020801
8499001

BUILDINGS AND PUBLIC WORKS

FIRE SAFETY TECHNIQUES

PROGRAM OF STUDY 5691

The *Fire Safety Techniques* program leads to the
Diploma of Vocational Studies (DVS)
and prepares the student to practise the occupation of

FIREFIGHTER

Direction générale de la formation professionnelle et technique

ACKNOWLEDGMENTS

The Ministère de l'Éducation wishes to thank the following people for their invaluable assistance in the development of this program.

DEVELOPMENT TEAM

Coordination, Ministère de l'Éducation du Québec

Jean-Paul Bergeron
Coordinator of the Buildings and Public Works Sector

Design and Development

Raymond Allard
Rémi Arsenault
Michel Cicioli
Daniel Courtemanche
Gilles Courtemanche
Alain Forget
Serge Gagnon
Yvon Robert
André Smith
Michel Vinet

Coordination, Commission scolaire Chomedey de Laval

Marcel Brisson

Technical Support

Pierre Cloutier
Technical Consultant in Program Development

Translation

Services à la communauté anglophone
Direction de la production en langue anglaise

This program of study, *Fire Safety Techniques*, is issued in accordance with section 461 of the *Education Act* (R.S.Q., c. I-13.3).

In conformity with the provisions of paragraph (a) of section 23 of the *Act respecting the Conseil supérieur de l'éducation* (R.S.Q., c. C-60), as replaced by section 569 of the *Education Act* (1988, chapter 84), the confessional committees of the Conseil supérieur de l'éducation have given their opinion on this program of study.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
GLOSSARY	3
PART I	
1. SYNOPTIC TABLE	7
2. PROGRAM TRAINING GOALS	9
3. COMPETENCIES	11
Grid of Learning Focuses	12
4. GENERAL OBJECTIVES	13
5. FIRST- AND SECOND-LEVEL OPERATIONAL OBJECTIVES	15
5.1 Definition	15
5.2 How to Read First-Level Operational Objectives	16
PART II	
MODULE 1: OCCUPATIONAL HEALTH AND SAFETY	21
MODULE 2: CONCEPTS IN FIRE SUPPRESSION	25
MODULE 3: SELF-CONTAINED BREATHING APPARATUS	29
MODULE 4: CONCEPTS RELATED TO BUILDINGS	35
MODULE 5: FIREFIGHTING EQUIPMENT	39
MODULE 6: FIREFIGHTING EQUIPMENT FOR USE WITH WATER	45
MODULE 7: VENTILATION TECHNIQUES	51
MODULE 8: EMERGENCY PROCEDURES IN LOW-RISE BUILDINGS	55
MODULE 9: EMERGENCIES INVOLVING HAZARDOUS MATERIALS	61
MODULE 10: THE OCCUPATION AND THE TRAINING PROCESS	65
MODULE 11: EMERGENCY CARE	69
MODULE 12: OVERHAULING, PROTECTION AND SUPERVISING TECHNIQUES	73

MODULE 13:	INTERPERSONAL RELATIONS IN THE WORKPLACE	77
MODULE 14:	PHYSICAL FITNESS	83
MODULE 15:	ELEVATING DEVICES	89
MODULE 16:	COMMUNICATIONS SYSTEMS	93
MODULE 17:	SOFTWARE	97
MODULE 18:	EMERGENCY PROCEDURES IN HIGH-RISE BUILDINGS	101
MODULE 19:	EMERGENCY PROCEDURES IN VARIOUS FIRE SITUATIONS	105
MODULE 20:	PSYCHOLOGICAL ASPECTS OF EMERGENCY SITUATIONS	109
MODULE 21:	RESCUE OPERATIONS	113
MODULE 22:	SPECIALIZED EMERGENCY PROCEDURES INVOLVING HAZARDOUS MATERIALS	119
MODULE 23:	RESCUE OPERATIONS ON WATER	125
MODULE 24:	CAR FIRE AND ACCIDENTS	129
MODULE 25:	GATHERING INFORMATION FOR AN EMERGENCY RESPONSE PLAN . .	135
MODULE 26:	PREVENTIVE ACTIVITIES	139
MODULE 27:	ENTERING THE LABOUR MARKET	145

INTRODUCTION

The *Fire Safety Techniques* program is based on the orientations for secondary school vocational education that calls for the participation of experts from the workplace and the field of education.

The program of study is developed in terms of competencies, expressed as objectives. These objectives are divided into modules, which are organized into teaching blocks. Various factors were kept in mind in developing the program: training needs, the job situation, purposes, goals, and strategies and means used to attain objectives.

The program of study lists the competencies that are the minimum requirements for a Diploma of Vocational Studies (DVS) for students in both the youth and adult sectors. It also provides the basis for organizing courses, planning teaching strategies, and designing instructional and evaluation materials.

The duration of the program is 1185 hours, which includes 600 hours spent on the specific competencies required to practise the

occupation and 585 hours on general competencies. The program of study is divided into 27 modules, which vary in length from 15 to 90 hours (multiples of 15). The time allocated to the program is to be used not only for teaching but also for evaluation and remedial work.

This document contains two parts. Part I is of general interest and provides an overview of the training plan. It includes a synoptic table of basic information about the modules, a description of the program training goals, the competencies to be developed and the general objectives, and an explanation of operational objectives. Part II is designed primarily for those directly involved in implementing the program. It contains a description of the operational objectives of each module.

In keeping with this broad approach, three accompanying documents will be provided: a teaching guide, an evaluation guide, and a planning guide.

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

GLOSSARY

Program Training Goals

Statements that describe the educational aims of a program. These goals are the general goals of vocational education adapted to a specific trade or occupation.

Competency

A set of socio-affective behaviours, cognitive skills or psycho-sensori-motor skills that enable a person to correctly perform a role, function, activity or task.

General Objectives

Instructional objectives that provide an orientation for leading the students to attain one or more related objectives.

Operational Objectives

Statements of the educational aims of a program in practical terms. They serve as the basis for teaching, learning and evaluation.

Module of a Program

A component part of a program of study comprising a first-level operational objective and the related second-level operational objectives.

Credit

A unit used for expressing quantitatively the value of the modules in a program of study. One credit corresponds to 15 hours of training. Students must accumulate a set number of credits to graduate from a program.

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

PART I

1. SYNOPTIC TABLE

Number of modules: 27
 Duration in hours: 1185
 Credits: 79

Fire Safety Techniques
 Code: 5691

CODE	TITLE OF THE MODULE	HOURS	CREDITS*
937 011	1. Occupational Health and Safety	15	1
937 023	2. Concepts in Fire Suppression	45	3
937 032	3. Self-Contained Breathing Apparatus	30	2
937 042	4. Concepts Related to Buildings	30	2
937 053	5. Firefighting Equipment	45	3
937 066	6. Firefighting Equipment for Use with Water	90	6
937 073	7. Ventilation Techniques	45	3
937 083	8. Emergency Procedures in Low-Rise Buildings	45	3
937 092	9. Emergencies Involving Hazardous Materials	30	2
937 101	10. The Occupation and the Training Process	15	1
937 113	11. Emergency Care	45	3
937 122	12. Overhauling, Protection and Supervising Techniques	30	2
937 132	13. Interpersonal Relations in the Workplace	30	2
937 145	14. Physical Fitness	75	5
937 153	15. Elevating Devices	45	3
937 161	16. Communications Systems	15	1
937 172	17. Software	30	2
937 182	18. Emergency Procedures in High-Rise Buildings	30	2
937 194	19. Emergency Procedures in Various Fire Situations	60	4
937 202	20. Psychological Aspects of Emergency Situations	30	2
937 215	21. Rescue Operations	75	5
937 225	22. Emergency Procedures in Situations Involving Hazardous Materials	75	5
937 232	23. Rescue Operations on Water	30	2
937 244	24. Car Fires and Accidents	60	4
937 252	25. Gathering Information for an Emergency Response Plan	30	2
937 265	26. Preventive Activities	75	5
937 274	27. Entering the Labour Market	60	4

* 15 hours = 1 credit

This program leads to a Diploma of Vocational Studies (DVS) in Fire Safety Techniques.

MEQ-DC (1130)
 Édifice Mario-Guyart, 28^e étage
 Québec (QC) G1R 5A5

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

2. PROGRAM TRAINING GOALS

The training goals of the *Fire Safety Techniques* program are based on the general goals of vocational education and take into account the specific nature of the occupation. These goals are:

To develop effectiveness in the practice of an occupation.

- To teach students to perform firefighting tasks and activities correctly, at an acceptable level of competence for entry into the job market.
- To prepare students to progress satisfactorily on the job by fostering:
 - intellectual skills conducive to making wise choices in carrying out tasks;
 - a concern for effective communication with superiors, colleagues and victims;
 - a constant concern for occupational health and safety;
 - attentiveness and speed in carrying out different activities;
 - a concern for neatness.

To foster personal development and the acquisition of occupation-related knowledge.

- To foster a sense of responsibility and a desire to succeed.
- To help students develop a concern for efficiency and excellence.

- To help students develop work methods and a sense of discipline.
- To help students understand the principles underlying the different tasks performed by firefighters.

To ensure job mobility.

- To help students acquire a solid basic education.
- To help students develop positive attitudes toward technological change and new situations.
- To help students develop the skills required to learn and obtain information.

To ensure integration into the job market.

- To help students learn about their rights and responsibilities as workers.
- To help students learn about the job market in firefighting.

3. COMPETENCIES

The competencies to be developed in the *Fire Safety Techniques* program are shown in the grid of learning focuses on the following page. The grid lists general and specific competencies as well as the major steps in the work process.

General competencies involve activities common to several tasks or situations. They cover, for example, the technological or scientific principles that the students must understand to practise the trade or occupation. Specific competencies focus on tasks and activities that are of direct use in the trade or occupation. The work process includes the most important steps in carrying out the tasks and activities of the trade or occupation.

The grid of learning focuses shows the relationship between the general competencies on the horizontal axis and the specific competencies on the vertical axis. The symbol (Δ) indicates a correlation between a specific competency and a step in the work process. The symbol ($\circ$) indicates a correlation between a general and a specific competency.

The symbols (Δ) and ($\bullet$) indicate that these relationships have been taken into account in the formulation of objectives intended to develop specific competencies related to the trade or occupation.

The logic used in constructing the grid influences the course sequence. Generally speaking, this sequence follows a logical progression in terms of the complexity of the learning involved and the development of the students' autonomy. The vertical axis of the grid shows the competencies directly related to the practice of a specific trade or occupation. These competencies are arranged in a relatively fixed order; therefore, the modules should be taught, insofar as possible, in the order represented on the grid. The modules including the general competencies on the horizontal axis should be taught in relation to those on the vertical axis. This means that some modules are prerequisite to others, while other modules are taught concurrently.

GRID OF LEARNING FOCUSES IN FIRE SAFETY TECHNIQUES			FIRST-LEVEL OPERATIONAL OBJECTIVES	DURATION (IN HOURS)	WORK PROCESS (major steps)								GENERAL COMPETENCIES (related to technology, subjects, personal development, etc.)														TOTALS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
					Find out the nature of the emergency	Go to the scene of the emergency	Find out what needs to be done	Organize the work	Carry out emergency procedures	Return the equipment, tools and vehicle in good condition	Participate in the evaluation of the procedure	Record information or write a report	Learn about occupational health and safety rules	Apply concepts in fire suppression	Use self-contained breathing apparatus	Apply concepts related to buildings	Use firefighting equipment	Use firefighting equipment for use with water	Provide emergency care	Use overhauling, protection and supervising techniques	Apply concepts of interpersonal relations in the workplace	Use techniques to promote physical fitness	Use elevating devices	Use communications systems	Use software	Apply concepts of psychology in emergency situations			Gather information for an emergency response plan	NUMBER OF OBJECTIVES	DURATION (IN HOURS)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
SPECIFIC COMPETENCIES (directly related to the practice of the specific occupation)			MODULES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				</

S: Situational objective

B: Behavioural objective

▲ Correlation between a step and a specific competency

▲ Correlation to be taught and evaluated

○ Correlation between a general and a specific competency

● Correlation to be taught and evaluated

BLOCKS

1

2

4. GENERAL OBJECTIVES

The general objectives of the *Fire Safety Techniques* program are presented below, along with the major statement of each corresponding first-level operational objective.

To develop in the students the competencies required to integrate harmoniously into the school and work environments.

- Determine their suitability for the occupation and the training process.
- Enter the labour market.

To develop in the students the competencies required to apply concepts and techniques essential to the occupation.

- Learn about occupational health and safety rules.
- Apply concepts in fire suppression.
- Use self-contained breathing apparatus.
- Apply concepts related to buildings.
- Use firefighting equipment.
- Use firefighting equipment for use with water.
- Provide emergency care.
- Use overhauling, protection and supervising techniques.
- Apply concepts of interpersonal relations in the workplace.
- Use techniques to promote physical fitness.
- Use elevating devices.
- Use communications systems.
- Use software.
- Apply concepts of psychology in emergency situations.

- Gather information for an emergency response plan.

To develop in the students the competencies required to apply firefighting techniques.

- Use ventilation techniques.
- Apply emergency procedures in low-rise buildings.
- Carry out the steps of a response plan in a situation involving hazardous materials.
- Apply emergency procedures in the case of a fire in a high-rise building.
- Apply emergency procedures in various fire situations.
- Conduct rescue operations in various situations.
- Apply specialized emergency procedures in situations involving hazardous materials.
- Carry out rescue operations on water.
- Carry out emergency procedures in situations involving car fires and accidents.

To develop in the students the competencies required to apply fire prevention techniques.

- Carry out preventive activities.

5. FIRST- AND SECOND-LEVEL OPERATIONAL OBJECTIVES

5.1 DEFINITION

A first-level objective is defined for each competency to be developed. Competencies are organized into an integrated training program designed to prepare students to practise the trade or occupation. This systematic organization of competencies produces better overall results than training by isolated objectives. More specifically, it fosters a smooth progression from one objective to the next, saves teaching time by eliminating needless repetition, and integrates and reinforces learning material.

First-level operational objectives are the main, compulsory teaching/learning targets and they are specifically evaluated for certification. There are two kinds of operational objectives: behavioural and situational.

- **A behavioural objective** is a relatively closed objective that describes the actions and results expected of the student by the end of a learning step. Evaluation is based on expected results.
- **A situational objective** is a relatively open-ended objective that outlines the major phases of a learning situation. It allows for output and results to vary from one student to another. Evaluation is based on the student's participation in the activities of the learning context.

Second-level operational objectives are intermediate teaching/learning targets deemed prerequisite for attaining first-level objectives. They are grouped according to the specifications (see 5.2 A) or the phases (see 5.2 B) of the first-level objective.

The division of operational objectives into first- and second-level objectives is based on a clear distinction between the levels of learning:

- learning involving prerequisite knowledge
- learning involving competencies

Second-level operational objectives indicate prerequisite knowledge. They prepare the students to learn what is necessary to attain the first-level operational objectives, which collectively lead to the development of a competency. The objectives should always be adapted to meet the particular needs of the individual students or groups of students.

First-level operational objectives cover the learning that the students need to develop a competency:

- The specifications or the phases of the objective determine or guide specific learning, thereby allowing the competency to be developed step by step.

- The objective as a whole (i.e. the six components and in particular the last phase of a situational objective) determines or guides the overall learning and the integration and synthesis of this learning, allowing the competency to be developed fully.

To attain the objectives, the following learning activities may be prepared:

- specific learning activities for second-level objectives
- specific learning activities for the specifications or phases of first-level objectives
- general learning activities for first-level objectives

5.2 HOW TO READ FIRST-LEVEL OPERATIONAL OBJECTIVES

A. How to Read a Behavioural Objective

Behavioural objectives consist of six components. The first three provide an overview of the objective:

1. The **expected behaviour** states a competency in terms of the general behaviour that the students are expected to have acquired by the end of the module.
2. The **conditions for performance evaluation** define what is necessary or permissible to the students during evaluation designed to verify whether or not the students have attained the objective. This means that the conditions for evaluation are the same wherever and whenever the program is taught.
3. The **general performance criteria** define the requirements by which to judge whether or not the results obtained are generally satisfactory.

The last three components ensure that the objective is understood clearly and unequivocally:

4. The **specifications of the expected behaviour** describe the essential elements of the competency in terms of specific behaviours.
5. The **specific performance criteria** define the requirements for each of the specifications of behaviour. They ensure a more enlightened decision on the attainment of the objective.
6. The **field of application** defines the limits of the objective, where necessary. It indicates cases where the objective applies to more than one task, occupation or field.

B. How to Read a Situational Objective

Situational objectives consist of six components:

1. The **expected outcome** states a competency as an aim to be pursued throughout the course.
2. The **specifications** outline the essential aspects of the competency and ensure a better understanding of the expected outcome.
3. The **learning context** provides an outline of the learning situation designed to help the students develop the required competencies. It is normally divided into three phases of learning:
 - information
 - performance, practice or involvement
 - synthesis, integration and self-evaluation
4. The **instructional guidelines** provide suggested ways and means of teaching the course to ensure that learning takes place and that the same conditions apply wherever and whenever the course is taught. These guidelines may include general principles or specific procedures.
5. The **participation criteria** describe the requirements the students must fulfil, which are usually related to each phase of the learning context. They focus on how the students take part in the activities rather than on the results obtained. Participation criteria are normally provided for each phase of the learning context.
6. The **field of application** defines the limits of the objective, where necessary. It indicates cases where the objective applies to more than one task, occupation or field.

PART II

MODULE 1: OCCUPATIONAL HEALTH AND SAFETY

Code: 937 011

Duration: 15 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

EXPECTED OUTCOME

By participating in the required activities of the learning context according to the indicated criteria, the students will be able to
learn about occupational health and safety rules.

SPECIFICATIONS

During this module, the students will:

- Learn about the importance of health and safety rules in firefighting.
- Identify the risks associated with firefighting and the related health and safety rules.
- Produce a summary table of the health and safety rules to apply during the different steps in the work process.

LEARNING CONTEXT

PHASE 1: Awareness of the Importance of Health and Safety Rules in Firefighting

- Given statistics on accidents involving firefighters, participating in activities to identify:
 - the number of accidents
 - the main causes of accidents
 - the consequences of accidents
- Learning about the main provisions related to the occupational health and safety of firefighters (laws, regulations, rights and responsibilities, programs, procedures).

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

LEARNING CONTEXT

- Discussing the advantages of prevention and the main ways of becoming involved in occupational health and safety.

PHASE 2: Information on the Risks Associated with Firefighting and the Related Health and Safety Rules

- Participating in activities to recognize or detect hazardous materials at the site of an emergency.
- Learning about the risks and safety measures associated with each of the steps in the emergency response process.
- Learning about the risks and safety measures associated with emergencies near electrical conductors.
- Learning about the characteristics of firefighting suits and their maintenance.
- Discussing the characteristics and limitations of various safety measures.

PHASE 3: Determination of the Health and Safety Rules to Be Applied During the Different Steps in the Work Process

- Associating health and safety rules with the risks related to different emergency situations and to different steps in the work process.
- Producing a summary table of health and safety rules to be applied during each step in the work process.
- Discussing improvements to be made to the summary table.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

INSTRUCTIONAL GUIDELINES

The teacher should:

- Make suitable reference materials available to the students (e.g. laws, regulations, guides, statistics on accidents, symbols and pictograms of hazardous materials).
- Encourage students to engage in discussions and express their opinions.
- Encourage students to acquire safe behaviour in various concrete emergency situations.
- Provide students with accurate information on the scope and limitations of health and safety rules and measures.
- Help students assess their summary table of health and safety rules.

PARTICIPATION CRITERIA

PHASE 1:

- Examine the reference materials closely.
- Participate actively in the various activities and show an understanding of the importance of health and safety rules.
- State the means they intend to take to become involved in occupational health and safety.

PHASE 2:

- Examine the reference materials closely.
- Participate actively in the various activities and show an interest in the topics dealt with.
- Carefully write down the information gathered.

PHASE 3:

- Produce a summary table of the health and safety rules to apply during the work process.
- Suggest improvements to the summary table.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking the activities of Phase 1:

1. Distinguish between the cause, the circumstances and the consequences of an accident.
2. Identify the legal and regulatory provisions related to health and safety in firefighting.
3. Identify the rights and responsibilities of various parties in matters of occupational health and safety.

Before undertaking the activities of Phase 2:

4. Identify the major sources of information and specialized resources for the identification of hazardous materials.
5. Interpret the main symbols and pictograms related to hazardous materials.
6. Recognize the risks and health and safety rules related to:
 - leaving the fire station
 - travelling to the scene of the emergency
 - arriving at the scene of the emergency
 - handling and positioning equipment
 - entering the building
 - encountering stressors
 - overhauling
 - returning to the fire station
 - cleaning and maintaining the equipment
7. Identify the characteristics and limitations of the different safety measures.

MODULE 2: CONCEPTS IN FIRE SUPPRESSION

Code: 937 023

Duration: 45 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply concepts in fire suppression** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone
- Given:
 - instructions provided by the teacher
 - simulations involving the suppression of different classes and types of fires
- Using:
 - different extinguishing methods
 - extinguishing equipment (portable fire extinguishers, stationary hoses)

GENERAL PERFORMANCE CRITERIA

- Observance of occupational health and safety rules
- Conformity with instructions and observance of time limit
- Observance of methods, techniques and directions for using extinguishing equipment
- Proper use of extinguishing agent

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

- | | |
|--|--|
| A. Determine the combustibles involved. | - Accurate determination of the classification of combustibles |
| B. Determine the extinguishing agent. | <ul style="list-style-type: none"> - Proper choice of extinguishing agents according to the combustibles involved - Consideration of the size of the fire |
| C. Select the equipment required to extinguish the fire. | <ul style="list-style-type: none"> - Accurate identification on the equipment of symbols and pictograms associated with the classification of combustibles - Proper choice of equipment |
| D. Extinguish the fire. | <ul style="list-style-type: none"> - Proper use of the appropriate extinguishing method - Observance of safety measures - Observance of techniques for using portable extinguishers |
| E. Clean and put away the equipment. | <ul style="list-style-type: none"> - Inspection of equipment in conformity with established standards - Use of appropriate products - Proper storage of equipment on vehicles |

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to determine the combustibles involved (A):

1. Apply basic concepts in fire chemistry.
2. Define *combustion*.
3. Recognize means of heat transfer.
4. Identify the stages of a fire and the related consequences.
5. Explain the phenomenon of fire spread.
6. Explain the different classes of fire.

Before learning how to determine the extinguishing agent (B):

7. Explain the characteristics and effects of each extinguishing agent.
8. Identify the advantages and disadvantages of each extinguishing agent.
9. Explain the hazards related to the use of each extinguishing agent.

Before learning how to select the equipment required to extinguish the fire (C):

10. Identify the different portable extinguishers.
11. Explain the characteristics of the different extinguishers.

Before learning how to clean and put away the equipment (E):

12. Explain the standards for maintaining and inspecting portable extinguishers.
13. Identify the different products used for maintenance and refilling.

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

MODULE 3: SELF-CONTAINED BREATHING APPARATUS

Code: 937 032

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **use self-contained breathing apparatus** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone or in a team
- Given:
 - instructions provided by the teacher
 - simulations involving the search for victims, ventilation and fire suppression
 - simulations involving emergency repair
- Wearing a full firefighting suit
- Using self-contained breathing apparatus used in fire departments

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Proper and safe use of self-contained breathing apparatus
- Strict observance of methods and techniques

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

- A. Prepare the self-contained breathing apparatus.
- B. Put on the self-contained breathing apparatus.
- C. Use techniques for moving around with a self-contained breathing apparatus.
- D. Use techniques for moving around with a self-contained breathing apparatus in an emergency situation.

SPECIFIC PERFORMANCE CRITERIA

- Careful inspection of each component of the self-contained breathing apparatus
- Strict observance of methods:
 - over the shoulder
 - over the head
 - on fixed supports
- Compliance with safety standards and standards for the use of the distress signal
- Careful inspection of the self-contained breathing apparatus
- Accurate determination of the characteristics of the building
- Observance of techniques for walking and squatting with a self-contained breathing apparatus
- Strict observance of search plan
- Proper use of means of communication (physical, visual, auditory contact)
- Proper use of techniques for moving around with a self-contained breathing apparatus in an emergency situation
- Proper use of emergency techniques to repair damaged or malfunctioning self-contained breathing apparatus

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE	
SPECIFICATIONS OF THE EXPECTED BEHAVIOUR	SPECIFIC PERFORMANCE CRITERIA
E. Maintain the self-contained breathing apparatus.	- Use of maintenance cards daily and after each use of self- contained breathing apparatus - Strict application of method for inspecting compressed air cylinders - Use of established methods for cleaning and disinfecting self- contained breathing apparatus after use

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to prepare the self-contained breathing apparatus (A):

1. Identify the different components of self-contained breathing apparatus and their use.
2. Identify the particular characteristics of self-contained breathing apparatus by manufacturer and model.
3. Identify the different techniques for inspecting self-contained breathing apparatus before use.
4. Show concern for the current standards applicable to air pressure with respect to the different types of air cylinders and hydrostatic tests to be performed.
5. Recognize the mechanical sounding devices used with self-contained breathing apparatus.

Before learning how to put on the self-contained breathing apparatus (B):

6. Identify the techniques for putting on and taking off self-contained breathing apparatus.
7. Identify the particular characteristics of distress signals and their use.

Before learning how to use techniques for moving around with a self-contained breathing apparatus (C):

8. Identify the characteristics of a search plan.
9. Identify the different techniques for moving around.
10. Describe the different means of communication (physical, visual, auditory contact).

Before learning how to use techniques for moving around with a self-contained breathing apparatus in an emergency situation (D):

11. Use the appropriate emergency techniques for different kinds of breakage or defects.
12. Use the different techniques for moving around alone or as part of a team.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to maintain the self-contained breathing apparatus (E):

13. Apply QSB or NFPA standards for maintaining and inspecting self-contained breathing apparatus and compressed air cylinders.
14. Use data sheets for self-contained breathing apparatus.

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

MODULE 4: CONCEPTS RELATED TO BUILDINGS

Code: 937 042

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply concepts related to buildings** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone
- Given:
 - instructions provided by the teacher
 - visits to buildings
 - audiovisual materials
 - building-related regulations
 - building plans

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Careful observation of the particular characteristics and condition of the buildings
- Complete analysis of all useful information
- Proper use of construction-related terms

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

- A. Identify the main characteristics of different types of buildings.
- B. Identify the characteristics of the building structures.
- C. Determine the degree of deterioration of a building during an emergency.

SPECIFIC PERFORMANCE CRITERIA

- Accurate distinction between the types of buildings
- Accurate determination of the risks related to the buildings
- Accurate description of the structural elements of the roof, roof space, windows and doors
- Accurate interpretation of the role of the structures in ventilation during an emergency
- Accurate description of the fire resistance of each type of material and the combination of materials
- Accurate identification of the characteristics and condition of the structures
- Accurate location of live and dead loads
- Accurate assessment of the risk of collapse

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to identify the main characteristics of different types of buildings (A):

1. Identify the construction categories.
2. Define the characteristics and uses of buildings according to the *National Building Code*.
3. Define the risks inherent in a building on fire.

Before learning how to identify the characteristics of the building structures (B):

4. Identify the different types of roofs and roof spaces.
5. Identify the characteristics of the different types of doors and windows and how they work.
6. Describe the types of framing used in roofs and walls.

Before learning how to determine the degree of deterioration of a building during an emergency (C):

7. Identify the fire resistance of the different materials used in building construction.
8. Observe the factors that contribute to the deterioration of a structure.
9. Identify indications of the risk of collapse.
10. Identify safety measures to be applied in situations in which there is a risk of collapse.

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

MODULE 5: FIREFIGHTING EQUIPMENT

Code: 937 053

Duration: 45 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **use firefighting equipment** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Given:
 - activities to be performed alone or in a team
 - simulations
- Using:
 - the appropriate safety equipment
 - firefighting equipment or tools

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Observance of techniques for using equipment and tools

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

- A. List the tools and equipment used in emergencies.

- B. Use lines.

- C. Use portable ladders.

- D. Use hand tools and devices in operations related to breaking into a building, safety, overhauling, rescuing and ventilation.

SPECIFIC PERFORMANCE CRITERIA

- Complete classification of tools and equipment according to their use
- Accurate grouping of tools and equipment according to whether they are manual, electric, hydraulic, pneumatic or gas-powered

- Proper use of lines in the following situations:
 - handling of tools and equipment
 - application of safety measures
 - rescue operations
- Proper inspection, maintenance and storage of lines

- Proper selection of portable ladders
- Proper transportation of portable ladders
- Proper application of different techniques for use
- Proper inspection, maintenance and storage of portable ladders

- Proper selection of tools according to the task to be performed
- Proper transportation (horizontal and vertical) of hand tools and equipment
- Use of hand tools and equipment in conformity with standards
- Appropriate cleaning, inspection, maintenance and storage of hand tools and equipment

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE	
SPECIFICATIONS OF THE EXPECTED BEHAVIOUR	SPECIFIC PERFORMANCE CRITERIA
E. Use electric or gas-powered tools and devices in operations related to breaking into a building, safety, overhauling, rescuing and ventilation.	- Proper selection of tools and devices according to the task to be performed - Use of tools and devices in conformity with manufacturers' standards and the instructions of fire departments - Inspection and maintenance of tools and equipment in conformity with manufacturers' standards - Careful completion of inspection cards - Careful observance of preventive maintenance programs

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to list the tools and equipment used in emergencies (A):

1. Describe the characteristics and functions of the tools and equipment used by firefighters.

Before learning how to use lines (B):

2. Describe the standards for manufacturing and using the tools and equipment used by firefighters.
3. List the dangers to which firefighters are exposed in emergencies.
4. Describe the safety measures to be taken when using the tools and equipment.
5. Make knots used by firefighters and state their functions.

Before learning how to use portable ladders (C):

6. Identify the components of the tools and equipment used by firefighters.
7. Describe the types of portable ladders and their uses.
8. List the sources of danger and the safety measures related to portable ladders.
9. Limit vertigo by controlling their behaviour.
10. Follow the maintenance programs for the tools and equipment used by firefighters.

Before learning how to use hand tools and devices in operations related to breaking into a building, safety, overhauling, rescuing and ventilation (D):

11. List the safety measures associated with hand tools and equipment.
12. Define the skills necessary to use hand tools and devices.
13. Disassemble and reassemble tools and pieces of mechanical equipment.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to use electric or gas-powered tools and devices in operations related to breaking into a building, safety, overhauling, rescuing and ventilation (E):

14. List the safety measures associated with electric and gas-powered tools and equipment, including filling the gas tank.
15. List the accessories for electric and gas-powered tools.
16. Describe the characteristics and limitations of electric and gas-powered tools and equipment.

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

MODULE 6: FIREFIGHTING EQUIPMENT FOR USE WITH WATER

Code: 937 066

Duration: 90 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **use firefighting equipment for use with water** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone and in a team
- Given:
 - instructions provided by the teacher
 - simulations
 - an area in which pumping appliances can be used
- Using:
 - the appropriate equipment
 - pressure and static water supplies
- Wearing a full firefighting suit

GENERAL PERFORMANCE CRITERIA

- Observance of occupational health and safety rules
- Conformity with instructions and observance of time limit
- Observance of methods, techniques and directions for using extinguishing equipment and emergency vehicles
- Effective use of water

FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR	SPECIFIC PERFORMANCE CRITERIA
--	-------------------------------

SPECIFIC PERFORMANCE CRITERIA

- A. Locate the water supplies.
- Accurate location of post hydrants
 - Accurate location of flow available
 - Accurate location of water supplies (e.g. static supplies, tank trucks)

- Accurate location of post hydrants
- Accurate location of flow available
- Accurate location of water supplies (e.g. static supplies, tank trucks)

- B. Use techniques for transporting, connecting and installing hoses, nozzles and accessories.
 - Loading of hoses onto pumping appliances in conformity with the usual water supply and discharge practices
 - Proper use of techniques for transporting rolled and unrolled hoses
 - Proper use of techniques for connecting hoses, nozzles and accessories when:
 - installing hoses
 - modifying hose lines
 - replacing hose lines
 - Effective handling of the different types of nozzles

- Loading of hoses onto pumping appliances in conformity with the usual water supply and discharge practices
- Proper use of techniques for transporting rolled and unrolled hoses
- Proper use of techniques for connecting hoses, nozzles and accessories when:
 - installing hoses
 - modifying hose lines
 - replacing hose lines
- Effective handling of the different types of nozzles

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

C. Use water supply and delivery methods.

SPECIFIC PERFORMANCE CRITERIA

- Choice of water delivery method appropriate to the situation
- Use of water supply and delivery methods with pumping appliances, portable pumps and tank trucks appropriate to the situation
- Appropriate supply to pumping appliance using pressure or static water supplies
- Constant concern for the optimal performance of the pumping appliance

D. Operate a pumping appliance.

- Conformity with tables and charts
- Conformity with standards for driving emergency vehicles
- Proper positioning of the pumping appliance
- Effective supply of nozzles, monitors, automatic fire suppression systems and stand pipes using static and pressure water supplies
- Effective use of booster stations
- Effective solutions to the main problems likely to be encountered when operating a pumping appliance

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

E. Inspect, clean and put away the equipment.

**SPECIFIC PERFORMANCE
CRITERIA**

- Complete inspection and maintenance of hoses, nozzles, couplings, accessories, portable pumps and pumping appliances in conformity with established standards
- Hydrostatic testing of hoses
- Appropriate corrosion testing of the pumping appliance
- Careful recording of the results on the maintenance cards

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to locate the water supplies (A):

1. Compare the main units in the international system of measurement to those in the imperial system and the American system.
2. Explain the basic concepts, principles and laws of hydraulics and their application in firefighting.
3. Demonstrate the characteristics of the different types of water pressure used by firefighters.
4. Explain the role and operation of pressure gauges and flow meters.
5. Explain the causes of head loss in hoses.
6. Calculate head loss.
7. Explain the causes of water hammer and means of preventing it.
8. Explain the recoil action produced by nozzles.
9. Identify the characteristics of the main water supplies.
10. List the characteristics of the different types of pipes.
11. Describe the types of post hydrants, their operation and the water flow available.

Before learning how to use techniques for transporting, connecting and installing hoses, nozzles and accessories (B):

12. Define the responsibilities and tasks of firefighters assigned to pumping appliances.
13. Describe the standards, characteristics and uses of the different types of hoses, nozzles and accessories.
14. Demonstrate the operation and use of hoses, nozzles and accessories.
15. Apply the different techniques for rolling hoses.
16. Apply the techniques for loading hoses onto pumping appliances.
17. Identify the extinguishing properties of water applied with a nozzle.
18. Identify the characteristics of the different types of water streams.
19. Associate the stages of a fire with the different types of attack.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to use water supply and delivery methods (C):

- 20. List the characteristics of static and pressure water supplies.
- 21. Explain the characteristics and operating methods of tank trucks, portable pumps and portable tanks.

Before learning how to operate a pumping appliance (D):

- 22. Explain the safety standards and requirements related to the operation of a pumping appliance.
- 23. Identify the main characteristics of a conventional pumping appliance: power train and pumping system.
- 24. Describe the different types of pumping appliances and their respective uses.
- 25. Describe the different types of pumps (volumetric and non-volumetric), including their performance and use.
- 26. Associate the data contained in the performance and certification charts with the performance of a pumping appliance.
- 27. Apply techniques for using static and pressure water supplies.
- 28. Use energy transfer methods (engagement and disengagement sequence).
- 29. Use methods for controlling pressure and flow.
- 30. Apply techniques for using dual impeller pumps.
- 31. Describe the factors that influence the position of a pumping appliance.
- 32. Describe the main problems likely to affect pumping and give possible solutions.

Before learning how to inspect, clean and put away the equipment (E):

- 33. Explain the importance of following an equipment inspection and maintenance program.
- 34. Accurately describe firefighters' tasks: methods and frequency of inspection, reports to be written, etc.
- 35. Demonstrate the method of performing hydrostatic tests on hoses.
- 36. Demonstrate the method of performing corrosion tests on pumping appliances.
- 37. Demonstrate the methods of performing vacuum and capacity tests on pumping appliances.

MODULE 7: VENTILATION TECHNIQUES

Code: 937 073

Duration: 45 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **use ventilation techniques** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Given:
 - instructions provided by the teacher
 - simulations of a variety of emergency situations (presence of smoke and gas)
- Wearing a full firefighting suit
- Using ventilation equipment

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Observance of techniques for using tools and equipment
- Proper and safe use of self-contained breathing apparatus

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

- | | |
|---|--|
| A. Identify useful information for ventilating the scene of an emergency. | <ul style="list-style-type: none"> - Accurate identification of the stage of the fire - Accurate identification of the characteristics of the building - Accurate location of all natural openings |
| B. Choose the ventilation techniques and equipment. | <ul style="list-style-type: none"> - Complete analysis of all information - Choice of techniques and equipment in accordance with the results of the analysis |
| C. Obtain instructions. | <ul style="list-style-type: none"> - Complete understanding of: <ul style="list-style-type: none"> • instructions related to ventilation • the importance of ventilation in an emergency situation |
| D. Ventilate the building. | <ul style="list-style-type: none"> - Appropriate preparation and use of ventilation equipment - Proper use of horizontal and vertical ventilation techniques |
| E. Clean and put away the equipment. | <ul style="list-style-type: none"> - Careful inspection and maintenance of equipment in conformity with established standards - Proper use of maintenance cards - Proper storage of equipment on vehicles |

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to use ventilation techniques:

1. List the advantages and the effects of effective ventilation.
2. Explain the particular precautions to take during ventilation operations.

Before learning how to identify useful information for ventilating the scene of an emergency (A):

3. Describe all the information useful for ventilating.

Before learning how to choose the ventilation techniques and equipment (B):

4. Describe the main methods of ventilating.
5. Explain the operation of the different tools for ventilating a building by breaking the structure.
6. Describe the effects of water streams (nozzles, hydrodynamic ventilation) on ventilation.
7. Describe the ventilation techniques applicable to the different types of roofs, floors, doors and windows.

Before learning how to ventilate the building (D):

8. Use the appropriate ventilation equipment.

Before learning how to clean and put away the equipment (E):

9. Explain manufacturer's maintenance and inspection standards.
10. Use data sheets for the equipment.

In the second part, the focus shifts to the classification of expenses. It provides a detailed breakdown of various types of costs, such as direct materials, direct labor, and manufacturing overhead. Each category is explained with examples and guidelines for proper accounting treatment. The document also addresses the allocation of overhead costs to different products or departments, ensuring that each unit bears its fair share of the total expenses.

The third section covers the calculation of unit costs. It shows how to aggregate all relevant costs and divide them by the total number of units produced. This calculation is crucial for determining the profitability of each product line and for setting appropriate selling prices. The document also discusses the impact of volume changes on unit costs and provides strategies to manage these fluctuations effectively.

Finally, the document concludes with a summary of the key points and a reminder of the ongoing nature of financial management. It stresses that accurate record-keeping and cost analysis are essential for the long-term success of any business. The document also includes a list of references and a glossary of terms for further study.

MODULE 8: EMERGENCY PROCEDURES IN LOW-RISE BUILDINGS

Code: 937 083

Duration: 45 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply emergency procedures in low-rise buildings** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Given:
 - instructions provided by the teacher
 - simulations of different emergency situations
 - a building with fewer than five storeys
- Wearing a full firefighting suit
- Using firefighting equipment

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Observance of techniques for using firefighting tools and equipment
- Observance of emergency procedures
- Proper and safe use of self-contained breathing apparatus

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Find out the nature of the emergency call.

B. Go to the scene of the emergency.

C. Find out what needs to be done.

D. Organize the work.

SPECIFIC PERFORMANCE CRITERIA

- Accurate identification of useful information
- Accurate determination of the type of building involved
- Accurate identification of route
- Compliance with standards for driving an emergency vehicle
- Accurate location of water sources
- Complete understanding of the nature of the emergency procedures required
- Accurate identification of the risks to people and property inherent in the situation
- Proper choice of ventilation and rescue techniques
- Proper preparation of the necessary equipment
- Proper choice of method of attack

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

E. Carry out emergency procedures.

- Proper use of the appropriate clothing and equipment
- Observance of each step in the operation plan
- Proper use of ventilation techniques
- Use of extinguishing methods appropriate to the situation
- Proper exploration of the building structure
- Proper use of methods of attack to control the fire
- Proper and immediate use of resuscitation techniques in compliance with Quebec Heart Foundation

F. Return the equipment, tools and vehicles in good condition.

- Careful inspection of each piece of equipment used
- Proper storage of equipment used

G. Participate in the evaluation of the operation.

- Careful recording of observations made during the procedure
- Accurate identification of improvements to be made

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to go to the scene of the emergency (B):

1. Describe the standards for driving an emergency vehicle.
2. Identify the parts of a response plan and an operation plan.

Before learning how to find out what needs to be done (C):

3. Describe the parts of a response plan:
 - resource people
 - type of building
 - public utilities (e.g. electricity, gas, water)
 - protection systems
 - hazardous materials
 - exits
4. Interpret the information in an operation plan:
 - rescue
 - fire spread
 - fire area
 - ventilation
 - strategy
 - protection and overhauling
 - supervision

Before learning how to organize the work (D):

5. Identify the rescue methods according to the situation.
6. Identify the types of strategies.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to carry out emergency procedures (E):

7. List the standards related to firefighting clothing and equipment.
8. Follow operation and response plans in use at the fire department.
9. Identify information about fire spread.
10. Use techniques for opening airways, as well as artificial respiration and cardiac massage techniques (babies, children, adults).

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

MODULE 9: EMERGENCIES INVOLVING HAZARDOUS MATERIALS

Code: 937 092

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must carry out the steps of a response plan in a situation involving hazardous materials in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Given:
 - instructions provided by the teacher
 - simulations of emergency situations involving hazardous materials
- Wearing a full firefighting suit
- Using firefighting equipment

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Observance of techniques for using firefighting equipment and tools
- Observance of emergency procedures
- Proper and safe use of self-contained breathing apparatus

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

- | | |
|---|--|
| A. Find out the nature of the emergency call. | <ul style="list-style-type: none"> - Accurate identification of useful information - Accurate determination of the type of building involved - Accurate determination of emergency procedures in a situation involving hazardous materials |
| B. Go to the scene of the emergency. | <ul style="list-style-type: none"> - Accurate definition of route - Determination of wind direction - Accurate location of water sources and underground pipes - Accurate assessment of differences in ground level |
| C. Find out what needs to be done. | <ul style="list-style-type: none"> - Complete understanding of the nature of the emergency - Cordoning off of emergency area |
| D. Organize the work. | <ul style="list-style-type: none"> - Recognition of the risks to people, property and the environment inherent in the situation - Accurate identification of emergency areas and personal safety equipment required - Accurate identification of additional available resources - Complete understanding of best offensive or defensive method of attack - Choice of techniques appropriate to the method of attack chosen - Proper preparation of the necessary equipment |

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

E. Carry out emergency procedures.

- Proper use of the appropriate clothing and equipment
- Observance of each step in the operation plan
- Proper use of techniques in accordance with the method of attack chosen
- Proper exploration of the emergency area

F. Return the equipment tools and vehicles in good condition.

- Careful inspection and decontamination of the equipment used
- Storage of equipment used in conformity with current standards

G. Participate in the evaluation of the procedure.

- Careful recording of observations made and actions taken during the procedure
- Accurate identification of improvements to be made

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to find out the nature of the emergency call (A):

1. Identify different sources of information on hazardous materials.
2. Describe the characteristics and uses of each of the five steps in an emergency procedure in a situation involving hazardous materials.

Before learning how to go to the scene of the emergency (B):

3. Describe the six categories of indicators that make it possible to identify a hazardous material.

Before learning how to find out what needs to be done (C):

4. Describe the factors governing the creation of a fire break.
5. Describe the factors governing the location of the control station.
6. Describe the parts of a response plan:
 - resource people
 - type of building
 - public utilities (e.g. electricity, gas, water)
 - protection systems
 - nature of the hazardous materials
 - location of exits
7. Interpret the information in an operation plan in a situation involving hazardous materials.

Before learning how to carry out the emergency procedures (E):

8. List the standards related to firefighting suits and equipment.
9. Use basic resuscitation techniques taking into account the possibility of contamination.

MODULE 10: THE OCCUPATION AND THE TRAINING PROCESS

Code: 937 101

Duration: 15 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

EXPECTED OUTCOME

By participating in the required activities of the learning context according to the indicated criteria, the students will be able to
determine their suitability for the occupation and the training process.

SPECIFICATIONS

During this module, the students will:

- Become familiar with the nature of the occupation.
- Understand the training program.
- Confirm their career choice.

LEARNING CONTEXT

PHASE 1: Information on the Occupation

- Learning about the job market in firefighting, i.e. job prospects, wages, advancement opportunities, roles and responsibilities of the different parties.
- Learning about the nature and requirements of the job (i.e. occupational and medical requirements, tasks, working conditions, evaluation criteria, workers' rights and responsibilities) by going on field trips, conducting interviews and studying reference materials.
- Presenting the information collected at a group meeting and discussing personal impressions of the occupation (i.e. advantages, drawbacks, requirements).

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

LEARNING CONTEXT

PHASE 2: Information on the Program and Participation in the Training Process

- Discussing the skills, aptitudes and knowledge needed to practise the occupation.
- Becoming familiar with the training program: the program of study, the training process, evaluation methods, certification of studies.
- Discussing how the training program will prepare them to find employment as firefighters.
- Giving their first impressions of the occupation and the training process.

PHASE 3: Evaluation and Confirmation of Career Choice

- Writing a report in which they:
 - describe their preferences, aptitudes and interests with respect to the occupation;
 - assess their career choice by comparing the different facets and demands of the occupation with their own preferences, aptitudes and interests.

INSTRUCTIONAL GUIDELINES

The teacher should:

- Create an atmosphere conducive to personal growth and professional development.
- Encourage students to engage in discussions and express their opinions.
- Motivate students to participate in the learning activities.
- Provide students with the means to acquire a clear understanding of the occupation.
- Help students assess their career choice honestly and objectively.
- Organize field trips to fire departments representative of the workplace.
- Make suitable reference materials available to the students (e.g. information on the occupation and training programs, handbooks).
- Arrange for students to meet with specialists in the field.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

PARTICIPATION CRITERIA

PHASE 1:

- Collect information on most of the topics to be covered.
- Express their views on the occupation at a group meeting, interrelating the information they have collected.

PHASE 2:

- Give their opinions on some requirements for practising the occupation.
- Examine carefully the reference materials provided.
- Listen carefully to explanations.
- Express their views on the training program at a group meeting, relating it to the occupation.
- Express their opinions clearly.

PHASE 3:

- Write a report that:
 - sums up their preferences, interests, aptitudes and qualities;
 - explains clearly how they arrived at their career choice, making the required associations;
 - justifies their decision to continue with the training program or not.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Be receptive to information on the occupation and the training process.
2. Express an interest in sharing their impressions of the occupation with the other members of the group.

Before undertaking the activities of Phase 1:

3. Gather information.
4. Determine a way of recording and presenting information.
5. Define the expression *acceptable level of competence for entry into the job market*.
6. Explain the principal rules of group discussion.

Before undertaking the activities of Phase 2:

7. Distinguish the skills from the aptitudes and knowledge required to practise the occupation of firefighter.
8. Describe the nature, function and content of a program of study.

Before undertaking the activities of Phase 3:

9. Distinguish preferences from aptitudes and interests.
10. Describe the main elements of a report confirming a career choice.

MODULE 11: EMERGENCY CARE

Code: 937 113

Duration: 45 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **provide emergency care** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone
- Given:
 - instructions provided by the teacher
 - simulations of different emergency situations
- Using the equipment necessary to provide emergency care

GENERAL PERFORMANCE CRITERIA

- Strict observance of the legal aspects of emergency care
- Conformity with instructions and observance of time limit
- Strict observance of safety measures
- Proper use of emergency care techniques in conformity with established protocols
- Proper use of the equipment required to provide emergency care

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Assess the situation.

B. Choose the appropriate emergency care.

C. Use techniques for stabilizing victims.

SPECIFIC PERFORMANCE CRITERIA

- Accurate analysis of the risks to victims and emergency team
- Careful observation of the condition of the victims
- Accurate determination of priorities in different emergency situations
- Rapid communication of information to auxiliary services
- Appropriate communication with emergency team and victims
- Proper choice of emergency care techniques
- Observance of aseptic techniques
- Proper use of emergency care equipment
- Proper application of cardiopulmonary resuscitation techniques using equipment
- Proper use of stabilization techniques
- Proper use of techniques for moving victims to a safe place

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to assess the situation (A):

1. Understand the importance of providing emergency care.
2. Know their role as first respondent.
3. Understand the importance of their legal responsibilities.
4. Be familiar with the protocols for first respondents.
5. Recognize the information required to assess a situation involving one or more victims.
6. Explain intervention strategies and the principles of organization according to the START method's concept of triage.
7. Explain the priorities of emergency care.

Before learning how to choose the appropriate emergency care (B):

8. Explain the role and responsibilities of other members of the emergency team and auxiliary services.
9. Describe the information to be transmitted to the other members of the emergency team and auxiliary services.
10. Identify the characteristics of the different emergency care techniques in accordance with the victims' condition.

Before learning how to use techniques for stabilizing victims (C):

11. Describe the different aseptic techniques and the various risks associated with emergency care.
12. Use emergency care equipment to stabilize victims.
13. Apply cardiopulmonary resuscitation techniques using equipment.
14. Use techniques to control haemorrhaging and to stabilize fractures.
15. Provide adequate care in different medical and life-threatening situations.
16. Explain and demonstrate the different techniques for moving victims.

MODULE 12: OVERHAULING, PROTECTION AND SUPERVISING TECHNIQUES

Code: 937 122

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **use overhauling, protection and supervising techniques** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone
- Given:
 - instructions provided by the teacher
 - simulations
- Using emergency equipment

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Observance of techniques for using tools and equipment
- Proper use of accessories available on site

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

- A. Learn about the different protection operations to be performed in an emergency.
- B. Choose the equipment necessary for the protection operations.
- C. Perform the protection operations.
- D. Perform overhauling and supervising techniques after the emergency.
- E. Clean and put away the equipment.

SPECIFIC PERFORMANCE CRITERIA

- Accurate selection of operations to be performed during and after the emergency
- Accurate selection of operations to be performed given the factors influencing fire spread
- Proper choice of equipment and accessories
- Conformity with instructions
- Observance of techniques and methods for using equipment
- Observance of priorities
- Proper choice of techniques
- Determination of avoidable damage
- Choice of appropriate overhauling equipment
- Inspection of equipment in conformity with established standards
- Use of appropriate cleaning products
- Proper storage of equipment on vehicles

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to learn about the different protection operations to be performed in an emergency (A):

1. Describe the different ways of laying out tarpaulins.
2. Describe the method of arranging furniture before covering it.
3. Describe the different ways of draining water from buildings.
4. Describe the public utilities in a building and their use in emergency procedures.
5. Explain the different ways of blocking openings after putting out a fire.

Before learning how to choose the equipment necessary for the protection operations (B):

6. Describe the characteristics and functions of the equipment used.

Before learning how to perform the protection operations (C):

7. Describe the techniques for using equipment for:
 - draining water
 - lighting
 - covering furniture
 - ventilation

Before learning how to perform overhauling and supervising techniques after the emergency (D):

8. Describe the techniques for removing debris.
9. Evaluate the solutions for minimizing damage and preserving information about the cause of the fire.
10. Describe the equipment used for overhauling.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to clean and put away the equipment (E):

11. Describe the method for inspecting tarpaulins.
12. Describe the different ways of folding tarpaulins.

MODULE 13: INTERPERSONAL RELATIONS IN THE WORKPLACE

Code: 937 132

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

EXPECTED OUTCOME

By participating in the required activities of the learning context according to the indicated criteria, the students will be able to
apply concepts of interpersonal relationships in the workplace.

SPECIFICATIONS

During this module, the students will:

- Become aware of the basic principles of interpersonal communication.
- Understand the basic principles of teamwork.
- Participate in team activities.
- Become aware of their strengths and weakness with respect to communication in a team.

LEARNING CONTEXT

PHASE 1: Awareness of the Basic Principles of Interpersonal Communication

- Becoming aware of the importance of communication in the workplace.
- Learning about the characteristics of and the steps involved in the process of interpersonal communication.
- Noting the difference between the rational aspect and the emotional aspect of a message.
- Learning about the different levels of language.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

LEARNING CONTEXT

- Interpreting verbal and nonverbal messages.
- Learning about the different obstacles to effective communication.

PHASE 2: Awareness of the Basic Principles of Teamwork

- Learning about the different types of motivation (intrinsic and extrinsic).
- Identifying the characteristics of an effective team.
- Discussing the main obstacles to teamwork.
- Analyzing as a team the factors that influence group dynamics.
- Recognizing the basic principles of leadership and membership.

PHASE 3: Participation in Team Activities

- Participating in activities that allow them to try out different communication techniques (decoding verbal and nonverbal messages, active listening, reformulation, reflection, oral expression techniques).
- Experimenting with the rules of communication for dealing with difficult situations or behaviour.
- Participating in activities that allow them to make decisions in a team or come to a group consensus.
- Noting their observations during the activities.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

PHASE 4: Evaluation of Their Ability to Communicate in a Team

- Analyzing their communication skills, including their strengths, their weaknesses and the new skills they acquired during the module.
- Comparing the behaviours, skills and attitudes necessary for teamwork with their current behaviours, skills and attitudes.
- Presenting the results of their evaluation, indicating the means to be taken to continually improve their ability to communicate and work in a team.

INSTRUCTIONAL GUIDELINES

The teacher should:

- Provide learning situations or case studies representative of the workplace.
- Create an atmosphere of trust and openness.
- Encourage discussion by using the appropriate facilitation techniques.
- Encourage students to express their opinions and participate in the activities.
- Make sure that the discussions take place in an atmosphere of respect.
- Encourage the students to question their way of communicating and working in a team.
- Encourage students to find ways of improving the performance of the team.
- Assist the students in their evaluation by providing them with questionnaires and analysis grids.

PARTICIPATION CRITERIA

PHASES 1 AND 2:

- Examine the reference materials closely.
- Participate actively in the various activities and show an interest in the topics dealt with.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

PARTICIPATION CRITERIA

PHASE 3:

- Participate actively in each of the group activities.
- Make an attempt to play their role seriously during the learning situations.
- Agree to try out the techniques and rules suggested.
- Discuss methods or activities to improve the performance of the team.
- Note their observations carefully.

PHASE 4:

- Write a detailed report on the skills they acquired during the module and on their strengths and weaknesses.
- Agree to share their report in a constructive manner with the other participants.
- Present the results of their analysis and the means to be taken to improve their communication and integrate into a team.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking the activities of Phase 1:

1. Explain the principal rules of group discussion.
2. Distinguish between an argument and an opinion.

Before undertaking the activities of Phase 2:

3. Become aware of the importance of teamwork in the performance of activities.
4. Understand the concepts of quality of life and job satisfaction.

Before undertaking the activities of Phase 3:

5. Identify the roles and responsibilities of the participants.
6. Understand the principles underlying reformulation and reflection.

MODULE 14: PHYSICAL FITNESS

Code: 937 145

Duration: 75 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **use techniques to promote physical fitness** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone
- Given:
 - instructions provided by the teacher
 - situations allowing them to develop cardiovascular capacity and the muscle groups used in the practice of the occupation
- Using the appropriate fitness equipment

GENERAL PERFORMANCE CRITERIA

- Compliance with safety standards
- Conformity with instructions and observance of time limit
- Systematic application of methods of maintaining physical fitness

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE	
SPECIFICATIONS OF THE EXPECTED BEHAVIOUR	SPECIFIC PERFORMANCE CRITERIA
A. Identify the objectives of the exercise.	- Understanding of the five determining factors of physical fitness - Accurate identification of the effects of training on the practice of the occupation - Development of a personal training program
B. Apply concrete measures to prevent back and joint injury.	- Proper performance of back strengthening exercises - Proper relaxation of back tension - Use of proper posture during physical exercise - Proper use of first-aid techniques for various injuries to tendons and muscles in the arms and legs - Achievement of level 4 to 6 on the National Back Fitness Test
C. Use techniques to develop the system for delivering oxygen (VO_2 max).	- Proper use of different aerobic and anaerobic training systems - Proper use of biomechanical elements used in running - Observance of measures to prevent musculoskeletal injuries related to running - Attainment of a level of performance determined by the 20-m shuttle run

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

D. Use bodybuilding techniques.

- Proper use of the different training systems to develop muscular strength and endurance
- Proper use of measures to prevent musculoskeletal injuries related to bodybuilding
- Use of a personal training record

E. Apply different weight-control measures.

- Use of proper diet before, during and after training
- Use of heart-healthy diet
- Use of different means of finding and maintaining a healthy weight
- Body mass index in accordance with muscle mass

F. Use muscle relaxation techniques.

- Proper use of the different relaxation techniques
- Recognition of muscular tension
- Control of breathing
- Mastery of at least one relaxation technique

G. Assess their attainment of the objectives.

- Development of a personal aerobic training and bodybuilding program
- Compliance with instructions for keeping a daily food diary
- Mastery of at least one relaxation technique (self-evaluation)

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to identify the objectives of the exercise (A):

1. Define the five determining factors of physical fitness.
2. Be familiar with the effects of training and its adaptations to the body.
3. Determine the physical requirements of the occupation.

Before learning how to apply concrete measures to prevent back and joint injury (B):

4. Understand how the back functions at work.
5. Identify safe positions of the back when moving.
6. Be familiar with the basic principles of first aid.
7. Identify the stages of injury.
8. Recognize the preventive measures to be taken in case of injury to the arms or legs.

Before learning how to use techniques to develop the system for delivering oxygen (VO_2 max) (C):

9. Identify the characteristics of the energy-producing systems (aerobic and anaerobic).
10. Define VO_2 max.
11. Be familiar with ways of improving VO_2 max.
12. Be familiar with the basic principles of a good running technique.
13. Identify the basic principles of VO_2 max training.

Before learning how to use bodybuilding techniques (D):

14. Distinguish between muscular strength and endurance.
15. Be familiar with the general principles of bodybuilding.
16. Differentiate among the different training systems.
17. Set out the stages in an annual training program.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to apply different weight-control measures (E):

18. Be familiar with how much cholesterol they consume.
19. Identify nutritional needs before, during and after training.
20. Define *healthy weight*.
21. List their dietary habits.

Before learning how to use muscle relaxation techniques (F):

22. Differentiate among the different relaxation techniques in terms of advantages and limitations.
23. Recognize the relationship between breathing and emotion.
24. Identify the different types of breathing.
25. Define *stress*.
26. Become aware of the effects of stress on behaviour.

MODULE 15: ELEVATING DEVICES

Code: 937 153

Duration: 45 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must
use elevating devices

in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Given:
 - instructions provided by the teacher
 - simulations
- Wearing a full firefighting suit
- Using elevating devices

GENERAL PERFORMANCE CRITERIA

- Observance of occupational health and safety rules
- Conformity with instructions and observance of time limit
- Observance of emergency procedure

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Identify the characteristics and uses of the main types of elevating devices.

- Differentiation among the different types of aerial ladders
- Differentiation among the different types of hydraulic platforms
- Differentiation among the different types of water towers

B. Apply concepts related to hydraulic and electrical systems.

- Accurate description of the circulation of fluids in hydraulic systems
- Accurate description of the operation of electrical systems

C. Apply concepts related to safety mechanisms on elevating devices.

- Understanding of the operation of safety mechanisms such as inclinometers, limited deployment control and stabilization control

D. Inspect the different components of an elevating device.

- Proper inspection of the hydraulic system
- Inspection of the components of the elevating device

E. Operate an elevating device.

- Positioning of the device appropriate to the situation
- Stabilization of the device appropriate to the situation
- Choice and performance of operations appropriate to the situation

F. Perform emergency operations in case of breakdown.

- Proper use of emergency mechanisms

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to identify the characteristics and uses of the main types of elevating devices (A):

1. Describe the different components of an elevating device.

Before learning how to apply concepts related to hydraulic and electrical systems (B):

2. Describe the operating principle of the different components of the hydraulic and electrical systems of an elevating device.

Before learning how to apply concepts related to safety mechanisms on elevating devices (C):

3. Recognize the risks of breakage and the precautions to be taken to avoid them.

Before learning how to inspect the different components of an elevating device (D):

4. Check the hydraulic fluid level.
5. Detect hydraulic fluid leaks and damaged hoses.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to operate an elevating device (E):

6. Operate a heavy emergency vehicle.
7. Describe the situations in which elevating devices are used.
8. List the safety rules associated with the use of elevating devices.
9. Describe the safe operational limits.
10. Transfer energy from the motor to the hydraulic system.
11. Perform stabilization, straightening, rotation, positioning, installation and lowering operations.
12. Apply safe operational limits.
13. Describe manoeuvres related to rescue operations using a stretcher.
14. Use equipment related to rescue operations such as stretchers, lines and harnesses.

Before learning how to perform emergency operations in case of breakdown (F):

15. Describe the operation of emergency valves.
16. Describe the operation of the standby pump.
17. Describe the operation of the emergency cranks.
18. Recognize the safe operational limits when operating an elevating device.

MODULE 16: COMMUNICATIONS SYSTEMS

Code: 937 161

Duration: 15 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **use communications systems** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone
- Given:
 - instructions provided by the teacher
 - simulations involving communication
 - established radio communication codes
 - all the necessary documentation
- Using the necessary equipment and accessories

GENERAL PERFORMANCE CRITERIA

- Observance of radio techniques
- Conformity with instructions and observance of time limit
- Compliance with current standards and legislation
- Observance of procedure and established communication codes
- Observance of technique for using equipment and accessories

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

A. Become familiar with the instructions.

- Complete understanding of the nature of the job to be done and the resulting responsibilities
- Accurate interpretation of instructions and communication techniques
- Complete understanding of the use and operation of the equipment

B. Organize the work.

- Accurate inspection of equipment
- Proper preparation of the necessary equipment

C. Send and receive messages.

- Concern for professional ethics
- Proper use of radio and communication techniques
- Accurate and full identification of messages
- Accurate determination of priority and urgent messages
- Proper use of radio codes
- Proper and accurate use of the time
- Proper use of the International Telegraph Alphabet
- Proper use of the communication equipment

D. Record the information.

- Careful noting of information in communication log book
- Accurate communication reports

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to use communications systems:

1. Describe radio and communication techniques.
2. Explain the operation and usefulness of the devices and accessories.
3. Explain the importance of transmitting information received accurately.
4. Explain the characteristics and advantages of using radio codes, the International Telegraph Alphabet and international time.

Before learning how to become familiar with the instructions (A):

5. Describe the responsibilities inherent in the use of communications systems.
6. Explain the laws related to communications.

Before learning how to organize the work (B):

7. Describe the procedure for inspecting the devices and accessories.

Before learning how to send and receive messages (C):

8. Explain the rules of professional ethics as they apply to the transmission of messages.
9. Define a concise, clear and accurate message.
10. Describe priority and urgent messages.
11. Describe the different participants that may be involved.

Before learning how to record the information (D):

12. Explain the procedure for recording information and for writing reports.

MODULE 17: SOFTWARE

Code: 937 172

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **use software** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone
- Given:
 - instructions provided by the teacher
 - all the necessary documentation
 - a central processing unit
 - the necessary computer hardware
- Using the software provided

GENERAL PERFORMANCE CRITERIA

- Conformity with instructions and observance of time limit
- Compliance with occupational health and safety standards
- Observance of computer techniques and procedures
- Observance of technique for using computer hardware

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Use the basic functions of an operating system.

B. Choose the software programs in accordance with the job to be done.

C. Use data entry functions of applications software.

SPECIFIC PERFORMANCE CRITERIA

- Understanding of the nature of the job to be done and the resulting responsibilities
- Accurate interpretation of instructions
- Understanding of the operation and use of the computer hardware
- Understanding of the main types of computer environments
- Understanding of the tasks that can be performed with different software programs
- Selection of appropriate software programs according to the job to be done
- Concern for the careful entry of data
- Proper use of computer methods and techniques
- Proper use of computer hardware
- Proper use of software programs

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to use the basic functions of an operating system (A):

1. Explain the basic concepts in computers.
2. Describe the system hardware:
 - central processing unit
 - input devices
 - output devices
3. Describe the different types of computer environments available:
 - Windows
 - DOS

Before learning how to choose the software programs in accordance with the job to be done (B):

4. Describe the different software programs available:
 - basic software programs
 - general application software
 - specialized application software
5. Describe the different tasks that can be performed with the available software programs.
6. Choose the most appropriate software program for the job.

Before learning how to use the data entry functions of application software (C):

7. Explain the importance of entering data accurately.
8. Describe what a software program can do with the data entered.
9. Describe the procedure for entering data with the software program used.

MODULE 18: EMERGENCY PROCEDURES IN HIGH-RISE BUILDINGS

Code: 937 182

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply emergency procedures in the case of a fire in a high-rise building** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Given:
 - instructions provided by the teacher
 - simulations involving high-rise buildings
 - simulations involving the technical installations in the building
- Wearing a full firefighting suit
- Using firefighting equipment

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Observance of techniques for using tools and equipment
- Proper and safe use of self-contained breathing apparatus
- Observance of emergency procedures in high-rise buildings
- Proper use of communications systems

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

A. Determine the nature of the emergency procedure required.

B. Prepare the emergency procedure.

**SPECIFIC PERFORMANCE
CRITERIA**

- Accurate interpretation of specific instructions
- Accurate determination of the nature of the information and the procedure
- Accurate evaluation of the characteristics of the building
- Accurate identification of useful information

- Choice of route taking into account traffic conditions
- Proper establishment of operating perimeter in accordance with sources of danger
- Proper selection and preparation of techniques and equipment in accordance with:
 - objectives
 - priorities
 - tactics
 - the available water supply
 - the extinguishing systems in place

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

C. Carry out the emergency procedure.

**SPECIFIC PERFORMANCE
CRITERIA**

- Proper application of each step in the operation plan
- Proper application of tactics in accordance with the strategy chosen
- Proper use of the equipment necessary to carry out the tactics
- Proper use of methods and equipment necessary to move around inside a high-rise building
- Proper use of first-aid techniques
- Conformity with occupational health and safety rules specific to emergency procedures in high-rise buildings
- Proper use of methods and equipment related to public utilities and protection
- Proper use of the appropriate elevating devices

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to determine the nature of the emergency procedure required (A):

1. Identify the collecting breechings for the sprinklers and the stand pipes.
2. Identify the fire cabinets.
3. Identify the components of the alarm panels and the automatic sprinklers.
4. Identify the emergency elevators and those reserved for firefighters.

Before learning how to prepare the emergency procedure (B):

5. Explain the dangers related to fenestration.
6. Describe the tactics related to emergency procedures in high-rise buildings.

Before learning how to carry out the emergency procedure (C):

7. Explain the methods of attack.
8. List the ways of moving around in a building during an emergency procedure.
9. Identify the uses of the different pieces of equipment and tools used in emergency procedures in high-rise buildings.
10. Name the public utilities to be taken into account in emergency procedures.

MODULE 19: EMERGENCY PROCEDURES IN VARIOUS FIRE SITUATIONS

Code: 937 194

Duration: 60 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply emergency procedures in various fire situations** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Given:
 - instructions provided by the teacher
 - simulations of various emergency situations
- Wearing a full firefighting suit
- Using firefighting equipment and various extinguishing agents

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Observance of techniques for using equipment and tools
- Observance of emergency procedures
- Proper and safe use of breathing apparatus
- Proper use of communications systems
- Effective teamwork

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Determine the nature of the emergency call.

B. Go to the scene of the emergency.

C. Determine what needs to be done.

D. Organize the work.

E. Carry out the emergency procedure.

SPECIFIC PERFORMANCE CRITERIA

- Accurate determination of the nature of the emergency
- Accurate and complete identification of useful information
- Accurate determination of the specific risks involved
- Proper choice of route according to the type of emergency
- Observance of techniques for approaching the scene of an emergency safely
- Accurate interpretation of instructions
- Accurate identification of facts and probabilities with respect to the protection of individuals and property
- Proper definition of perimeter in accordance with the sources of danger
- Proper identification of tactics in accordance with the chosen strategy
- Accurate application of occupational health and safety instructions for each situation
- Proper choice of extinguishing agent and methods of application
- Proper choice of equipment
- Proper use of first-aid techniques

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

F. Clean and put away the equipment.

G. Participate in the evaluation of the procedure.

**SPECIFIC PERFORMANCE
CRITERIA**

- Inspection of equipment in conformity with established standards
- Proper use of:
 - maintenance products
 - replacement parts
- Proper storage of equipment on vehicles

- Careful recording of observations made during the procedure
- Accurate identification of strengths and weaknesses

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to determine the nature of the emergency call (A):

1. Identify the characteristics of the different types of emergencies to which firefighters may be required to respond (e.g. car fires, boat fires, grass fires, forest fires, chemical fires, fires in distribution substations, fires in large buildings).
2. Describe an accurate way of acknowledging receipt of an emergency call.

Before learning how to organize the work (D):

3. Ensure the recovery of residue and debris, as needed.

Before learning how to carry out the emergency procedure (E):

4. Make sure the resources necessary to put out the fire are available.

MODULE 20: PSYCHOLOGICAL ASPECTS OF EMERGENCY SITUATIONS

Code: 937 202

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply concepts of psychology in emergency situations** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Given:
 - instructions provided by the teacher
 - various types of emergency situations (fires, car accidents, rescue missions)
 - specialized documentation
- Using basic counselling techniques

GENERAL PERFORMANCE CRITERIA

- Conformity with instructions
- Observance of techniques for dealing with victims

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

A. Apply stress management techniques in emergency situations.

- Accurate identification of the symptoms of stress
- Proper application of techniques for managing stress before, during and after the emergency procedures

B. Communicate with victims in emergency situations.

- Accurate identification of the psychological and physiological reactions of victims
- Understanding of the information to be transmitted to victims, depending on the situation
- Demonstration of empathy in their communications

C. Apply emotional recovery techniques.

- Accurate identification of the different types of psychological support
- Verbalization of the incident
- Proper use of relaxation techniques

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to apply stress management techniques in emergency situations (A):

1. Identify the sources of stress related to firefighting.
2. Recognize the personal characteristics of people who apply emergency procedures.
3. Distinguish between the type of stress that stimulates constructive responses and the type of stress that causes panic.
4. Identify the main symptoms of stress among firefighters.

Before learning how to communicate with victims in emergency situations (B):

5. Identify the different observable psychological and physiological reactions in victims.
6. Recognize the characteristics of victims in an emergency situation.
7. Identify the sources of event-related stress in victims.
8. Describe the concept of empathy as demonstrated in a given situation.
9. Explain the nature of the information to be transmitted to victims in various emergency situations.

Before learning how to apply emotional recovery techniques (C):

10. Recognize the different types of support in dealing with stress.
11. Develop skills for channelling stress.
12. Experiment with verbalization techniques in a small group.
13. Experiment with relaxation techniques.

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

MODULE 21: RESCUE OPERATIONS

Code: 937 215

Duration: 75 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **conduct rescue operations in various situations** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Given:
 - instructions provided by the teacher
 - simulations of various rescue situations
 - first-aid techniques
- Wearing a full firefighting suit
- Using various types of rescue equipment

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Proper use of equipment in accordance with the type of rescue operation

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Determine the nature of the rescue operation.

B. Organize the work.

C. Communicate with the victims.

SPECIFIC PERFORMANCE CRITERIA

- Accurate identification of useful information
- Accurate identification of personal risks
- Observance of the appropriate safety techniques
- Proper establishment of a safety perimeter in accordance with the type of rescue operation
- Proper choice of rescue technique
- Proper choice and preparation of rescue and safety equipment
- Proper use of techniques for locating victims
- Proper choice and use of techniques for stabilizing or immobilizing the area
- Proper use of lifting devices
- Appropriate approach
- Appropriate use of psychology in a rescue operation
- Maintaining of quality communication with the victim and the response team
- Appropriate and continual explanation of pertinent information and progress to victims

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

D. Rescue the victims.

- Proper and careful application of first-aid techniques
- Proper use of rescue techniques in accordance with the type of operation
- Proper use of equipment
- Proper use of techniques for transporting victims on a stretcher with one, two or three people

E. Clean and put away the equipment.

- Careful inspection of equipment used
- Cleaning of equipment used
- Proper storage of equipment

F. Participate in the evaluation of the intervention.

- Careful recording of observations made during the intervention
- Accurate identification of points to be improved

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to determine the nature of the rescue operation (A):

1. Explain the role and limitations of a rescue team.
2. Describe the characteristics of the various emergency situations in which a rescue team may be called upon to participate.
3. Describe the information useful to a rescue operation.
4. Define the dangers of the different types of rescue sites.
5. Use different types of safety equipment for rescue operations in high places and in confined or underground areas.

Before learning how to organize the work (B):

6. Identify the characteristics and functions of the different rescue techniques.
7. Identify the characteristics and functions of the different types of rescue and support equipment.
8. Characterize the different techniques for locating victims.
9. Make the different knots used in rescue operations.
10. Identify the problems related to earthquakes and other types of collapses.
11. Use shoring equipment.
12. Use techniques for stabilizing and immobilizing tunnels, trenches and walls.
13. Define the manoeuvres for approaching victims.

Before learning how to rescue the victims (D):

14. Use rappelling techniques.
15. Apply the main climbing techniques used in rescue operations in high places.
16. Use the different techniques for climbing using a fixed line.
17. Use techniques for locating and rescuing victims in confined or underground areas.
18. Use various techniques for transporting victims in a rescue operation.
19. Describe the techniques for using support equipment.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to clean and put away the equipment (E):

20. Describe the standards for inspecting and maintaining the equipment used.

Before learning how to participate in the evaluation of the intervention (F):

21. Understand the physical and legal limitations that apply to rescue teams.

22. Be familiar with specific department instructions.

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

MODULE 22: SPECIALIZED EMERGENCY PROCEDURES INVOLVING HAZARDOUS MATERIALS

Code: 937 225

Duration: 75 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must apply specialized emergency procedures in situations involving hazardous materials in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Given:
 - instructions provided by the teacher
 - simulations of situations involving hazardous materials
 - various detection and measuring instruments
 - specialized documentation on hazardous materials or specialized software
- Wearing a full firefighting suit and a chemical protection suit

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Observance of specialized emergency procedures to be used in situations involving hazardous materials
- Proper use of safety equipment and respiratory protective equipment
- Proper use of detection and measuring instruments
- Proper use of information contained in the guides and of symbols identifying hazardous materials
- Proper use of firefighting equipment

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Determine the nature of the emergency.

B. Go to the scene of the emergency.

C. Determine what needs to be done.

SPECIFIC PERFORMANCE CRITERIA

- Accurate collection of information needed to identify the hazardous materials involved
- Accurate identification of useful information
- Collection of supplementary relevant information
- Observance of techniques for approaching the scene of an emergency safely
- Accurate location of water sources and underground pipes
- Accurate assessment of differences in ground level
- Accurate interpretation of sensory perceptions and facts
- Safe approach of the emergency area
- Observance of the rules respecting safety perimeters
- Compliance with safety instructions
- Attentiveness to specialists' opinions

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

D. Carry out the emergency procedure.

SPECIFIC PERFORMANCE CRITERIA

- Proper application of tactics in accordance with the strategy chosen
- Proper choice of equipment
- Safe use of the stabilizing equipment needed
- Safe use of safety equipment in situations involving hazardous materials that can be absorbed, inhaled or ingested by the human body
- Proper use of instruments for detecting and measuring:
 - hazardous materials
 - climatic conditions
 - the location of victims
- Proper use of communication equipment
- Proper choice of nozzles and hoses
- Proper use of extinguishing foams

E. Use techniques for decontaminating firefighting and safety equipment.

- Observance of safety rules with respect to decontamination
- Proper choice of decontamination solution
- Proper use of each decontamination technique
- Consideration of the expiry dates of certain products or pieces of equipment

F. Participate in the evaluation of the intervention.

- Careful recording of observations made and actions taken
- Accurate identification of points to be improved

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to determine the nature of the emergency (A):

1. Identify the characteristics of the laws and regulations governing the storage, maintenance and transportation of hazardous materials.
2. Define the organizations associated with emergency procedures.
3. Identify the role of each member of the emergency response team.
4. Describe the locations and circumstances that might pose a risk with respect to hazardous materials.
5. Identify the main techniques for labelling hazardous materials.
6. Use information guides, techniques and software specialized in hazardous materials.

Before learning how to go to the scene of the emergency (B):

7. Identify the appropriate communication equipment to be used.
8. Define the safety rules to apply when approaching the scene of an emergency according to the guides.

Before learning how to determine what needs to be done (C):

9. Describe the techniques for using detection and measuring instruments.
10. Identify the relevance and the importance of receiving information from specialists.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to carry out the emergency procedure (D):

11. Define the priorities in rescue, filling and recovery operations.
12. Describe the situations in which firefighters must intervene in the presence of hazardous materials.
13. Identify the various specialized strategies used in situations involving hazardous materials.
14. Determine the required personal protection.
15. Be familiar with the range of protective clothing used in emergency situations involving hazardous materials.
16. Use specialized equipment.
17. Describe the steps in an operation plan for a situation involving hazardous materials.
18. Be familiar with techniques for protecting the environment.
19. Identify the types of injuries related to hazardous materials.
20. Describe first-aid techniques to be used in case of injury.
21. List the characteristics of multi-purpose foam concentrates for fires involving hydrocarbons and polar chemicals.
22. Explain the three types of properties of foam:
 - intrinsic to the foam itself
 - foam in contact with a combustible liquid
 - foam in contact with fire
23. Describe the classifications of foams and their methods of extinguishing fire.
24. Demonstrate the techniques for applying foam.
25. Explain the factors that influence the critical rate of application of a foam.
26. Describe the operation of the equipment needed to produce the different types and quantities of foam.

Before learning how to use techniques for decontaminating firefighting and safety equipment (E):

27. Describe the techniques and procedure for decontaminating personnel and equipment.

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

MODULE 23: RESCUE OPERATIONS ON WATER

Code: 937 232

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **carry out rescue operations on water** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Given:
 - instructions provided by the teacher
 - simulations
 - a nautical chart
 - communications systems
- Using:
 - specialized equipment for rescue operations on water
 - specialized safety equipment

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Observance of emergency procedures
- Observance of techniques for using the different types of specialized equipment
- Proper use of communications systems
- Effective teamwork

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Determine the nature of the emergency.

- Accurate location of the scene of the emergency
- Accurate and complete identification of useful information: number of victims, weather conditions, thickness of the ice, etc.

B. Go to the scene of the emergency.

- Proper use of telecommunication techniques
- Proper use of techniques for locating victims
- Continuous contact with victims
- Proper choice of access to body of water
- Accurate identification of sources of danger: boats, current, etc.

C. Organize the work.

- Proper choice of equipment and techniques
- Understanding of the role of the necessary relief crews and complementary services
- Accurate identification of sources of danger
- Accurate identification of the types of personal safety equipment and the degree of protection they afford

D. Communicate with the victims.

- Appropriate application of the concepts of psychology as they apply to rescue operations
- Relevant information on the progress of the rescue operation transmitted to the victims and the control centre

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

E. Rescue the victims.

- Appropriate adaptation of techniques
- Proper use of safety equipment
- Proper application of first-aid techniques
- Proper choice and use of techniques for transporting victims

F. Return the specialized equipment and tools in good condition.

- Complete list of tools and equipment used
- Complete inspection of tools and equipment in accordance with the standards established by the manufacturers and fire departments
- Careful completion of inspection cards and reports

G. Participate in the evaluation of the intervention.

- Careful recording of observations made during the intervention
- Accurate identification of strengths and weaknesses
- Accurate identification of training needs

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to determine the nature of the emergency (A):

1. Recognize the main symbols used on nautical charts.
2. Given nautical charts, identify the main characteristics of bodies of water: depth, current, ice, etc.
3. Use communications systems for rescue operations on water.

Before learning how to go to the scene of the emergency (B):

4. Apply techniques for setting specialized equipment in the water.
5. Identify the minimum swimming requirements.
6. Decode signals given with pyrotechnic devices.
7. Identify the various techniques for locating victims.

Before learning how to organize the work (C):

8. Identify the main characteristics of submersed vehicles.
9. Prepare the necessary safety equipment.

Before learning how to rescue the victims (E):

10. Apply first-aid techniques used in cases of hypothermia.
11. Rescue victims on ice using portable ladders, lines or other appropriate equipment.

MODULE 24: CAR FIRES AND ACCIDENTS

Code: 937 244

Duration: 60 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must carry out emergency procedures in situations involving car fires and accidents in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Given:
 - instructions provided by the teacher
 - simulations
 - communications systems
- Using the jaws of life equipment
- Wearing a full firefighting suit

GENERAL PERFORMANCE CRITERIA

- Strict compliance with occupational health and safety standards
- Conformity with instructions and observance of time limit
- Observance of techniques for using specialized equipment
- Observance of emergency procedures
- Proper use of communications systems

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Determine the nature of the emergency.

B. Go to the scene of the emergency.

C. Organize the work.

SPECIFIC PERFORMANCE CRITERIA

- Collection of information about the emergency
- Proper use of road or district maps
- Rapid identification of potential difficulties on the way
- Proper use of communications system
- Driving technique appropriate under the circumstances
- Effective and safe positioning of emergency vehicles
- Realistic assessment of the task
- Accurate identification of available personal safety equipment and the degree of protection it affords
- Proper choice of techniques and equipment
- Accurate identification of the necessary complementary services
- Accurate identification of sources of danger
- Rapid disconnection of car battery
- Proper establishment of safety perimeter
- Evacuation of unharmed or slightly injured individuals

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

D. Communicate with the victims.

E. Rescue the victims.

SPECIFIC PERFORMANCE CRITERIA

- Appropriate application of psychological concepts as they apply to rescue operations
- Appropriate and continuous explanation of relevant information and progress to victims and commanding officer
- Appropriate adaptation of techniques
- Rapid setup of a booster line
- Safe immobilization of damaged vehicles
- Effective use of jaws of life equipment
- Victims freed according to standard procedure
- Appropriate measures used to:
 - maintain vital functions
 - stabilize the victims
- Effective use of complementary resources
- Proper choice and use of techniques for transporting victims
- Effective assistance of ambulance technicians

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

F. Return the specialized equipment and tools in good condition.

- Complete list of tools and equipment used
- Complete inspection of equipment in accordance with the standards established by the manufacturers and fire departments
- Careful completion of inspection cards and reports

G. Participate in the evaluation of the intervention.

- Careful recording of observations made during the intervention
- Accurate identification of strengths and weaknesses
- Accurate identification of training needs

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to organize the work (C):

1. Identify the main characteristics of the vehicles involved.
2. Identify the rules for positioning emergency vehicles.
3. Use support equipment.
4. Use jaws of life equipment in accordance with the tasks to be performed.
5. Assess the possibilities and limitations of each tool used in car fires and accidents.

Before learning how to rescue the victims (E):

6. Use the different techniques for freeing victims.
7. Identify the techniques for effectively limiting fluid leaks from the vehicle.

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

MODULE 25: GATHERING INFORMATION FOR AN EMERGENCY RESPONSE PLAN

Code: 937 252

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **gather information for an emergency response plan** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone
- Given:
 - instructions provided by the teacher
 - descriptions of buildings provided by the teacher
 - forms for reporting information and sketches for the necessary emergency response plans
 - all the necessary documentation
- Using the necessary equipment and accessories

GENERAL PERFORMANCE CRITERIA

- Conformity with instructions and observance of time limit
- Compliance with occupational health and safety standards
- Compliance with existing legislation
- Observance of techniques for gathering information for an established emergency response plan

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Identify the buildings or sites to be visited.

B. Make up a schedule of buildings and sites to visit in order of priority.

C. Gather the information.

SPECIFIC PERFORMANCE CRITERIA

- Understanding of the nature of the task
- Accurate interpretation of instructions
- Accurate identification of buildings at risk
- Accurate schedules
- Accurate determination of priorities in accordance with the risks involved
- Concern for professional ethics
- Proper preparation of the necessary equipment
- Proper choice of forms for reporting information and sketches for the emergency response plan
- Accurate identification of facts essential to the emergency response plan
- Accurate and complete identification of information and sketches of the building
- Accurate interpretation of the sketch

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE	
SPECIFICATIONS OF THE EXPECTED BEHAVIOUR	SPECIFIC PERFORMANCE CRITERIA
D. Record the information gathered.	- Careful recording of the information and sketches for the emergency response plan - Observance of technique for recording information for the emergency response plan - Accurate recording of information and sketches for the emergency response plan

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to gather information for an emergency response plan:

1. Explain the objectives of an emergency response plan and the importance of the information contained therein.
2. Explain the existing legislation.

Before learning how to identify the buildings or sites to be visited (A):

3. Describe the classification of buildings in terms of the risks they pose.

Before learning how to make up a schedule of buildings and sites to be visited in order of priority (B):

4. Describe the priorities in terms of the risks posed by buildings.
5. Describe the criteria used to make up a schedule.

Before learning how to gather the information (C):

6. Describe the different types of emergency response plans used in fire safety.
7. Describe the different types of forms available to gather information for an emergency response plan.
8. Describe the different types of equipment required.
9. Explain the importance of accuracy and quality.
10. Explain the technique for making appointments for these visits.
11. Describe the essential information to be recorded in an emergency response plan according to the type of building.

Before learning how to record the information gathered (D):

12. Explain the technique for recording information for an emergency response plan.

MODULE 26: PREVENTIVE ACTIVITIES

Code: 937 265

Duration: 75 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **carry out preventive activities** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone
- Given:
 - instructions provided by the teacher
 - descriptions of buildings provided by the teacher
 - the necessary forms and reports
 - the relevant documentation: laws, codes, regulations, standards, etc.
- Using:
 - inspection visits
 - the necessary equipment and accessories
 - specialized software

GENERAL PERFORMANCE CRITERIA

- Observance of the mandate given them by the municipality to prevent fires
- Conformity with instructions and observance of time limit
- Compliance with occupational health and safety standards
- Compliance with existing legislation
- Observance of established prevention techniques
- Consideration of the basic concepts related to fire

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Become familiar with the instructions.

SPECIFIC PERFORMANCE CRITERIA

- Understanding of the nature of the task
- Accurate interpretation of special instructions
- Accurate interpretations of the limitations of their mandate
- Accurate identification of the constraints inherent in the types of buildings
- Accurate interpretation of the information in the emergency response plan

B. Organize the work.

- Proper choice of forms or reports
- Proper preparation of the necessary equipment
- Proper preparation of visits and exercises

C. Do fire safety inspections.

- Concern for professional ethics
- Proper use of inspection techniques
- Accurate identification of anomalies with respect to fire safety
- Appropriate measures suggested to correct the anomalies

D. Supervise fire drills.

- Understanding of the steps to follow during the drill
- Careful supervision of the drill

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

E. Record the information.

**SPECIFIC PERFORMANCE
CRITERIA**

- Careful recording of observations made during drills or inspections
- Accurate references to sections of applicable laws, regulations or standards
- Accurate reports
- Observance of technique for following up inspections

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to carry out preventive activities:

1. Explain the legal or professional principles governing the role of firefighters in fire safety.
2. Describe the fields of application of fire prevention regulations.

Before learning how to organize the work (B):

3. Describe the different forms used in prevention.
4. Describe the characteristics of the equipment used in prevention.
5. Describe the steps to follow to prepare fire safety inspections and fire drills.

Before learning how to do fire safety inspections (C):

6. Describe the different inspection techniques depending on the type of building involved.
7. Explain the most common anomalies associated with the various risks of different types of buildings.
8. Describe the operation of the different fire protection and extinguishing systems.
9. Explain the legislation related to the different anomalies.
10. Explain the different recommendations that could be made to correct each anomaly in accordance with the fire department's policies.
11. Describe the different techniques for replacing sprinkler heads.

Before learning how to supervise fire drills (D):

12. Explain the objectives of fire drills.
13. Explain the different techniques used to carry out fire drills.
14. Explain the observations essential to the evaluation of fire drills.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to record the information (E):

15. Explain the importance of accuracy.
16. Describe the technique for following up on inspections.

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

MODULE 27: ENTERING THE LABOUR MARKET

CODE: 937 274

Duration: 60 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

EXPECTED OUTCOME

By participating in the required activities of the learning context according to the indicated criteria, the students will be able to **enter the labour market.**

SPECIFICATIONS

During this module, the students will:

- Become familiar with the realities of the occupation.
- Integrate the knowledge, skills, attitudes and habits they acquired during their training.
- Learn about the different changes in perception that result from a practicum in the workplace: work context, occupational practices, aptitudes, preferences and fields of interest.

LEARNING CONTEXT

PHASE 1: Preparation for the Practicum in the Workplace

- Learning about the terms and conditions of the practicum.
- Listing fire departments likely to hire students for a practicum in the workplace.
- Learning about the physical organization of the fire department.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

LEARNING CONTEXT

PHASE 2: Participation in Work-related Activities

- Observing the work context: types of fire departments, internal structure, working conditions, interpersonal relationships, health and safety.
- Working with the firefighting team, adapting to their work methods and schedule, etc.
- Observing, performing or participating in a variety of occupational tasks.
- Keeping a log of their observations on the work context and their daily tasks.

PHASE 3: Comparison of Initial Perceptions with the Reality of the Workplace

- Establishing relationships between their experience in the workplace and the knowledge acquired in school.
- Discussing the accuracy of their perception of the occupation before and after the practicum: work environment, occupational practices, etc.
- Discussing the consequences of their experience on their choice of a job: aptitudes, preferences and fields of interest.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

INSTRUCTIONAL GUIDELINES

The teacher should:

- Provide students with the means of choosing a practicum position wisely.
- Maintain close cooperation between the school and the workplace.
- Work with people in the workplace to ensure that students perform occupational tasks and develop their autonomy.
- Make sure that there is a responsible person in the fire department to supervise the student.
- Ensure the proper support and supervision of each student during the practicum.
- Intervene in case of difficulties or problems.
- Promote exchanges of opinion among the students.

PARTICIPATION CRITERIA

PHASE 1:

- Make an effort to understand the practical organization of the practicum and their responsibilities.

PHASE 2:

- Follow the instructions of the fire department with respect to activities, work schedules and the rules of professional ethics.
- Apply the occupational health and safety rules followed in the fire department.
- Show an interest in performing a variety of tasks.
- Record in their log their observations of the tasks performed during the practicum.

PHASE 3:

- Share their experience of the workplace with their classmates.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking the activities of Phase 2:

1. Describe the behaviour to adopt in the workplace.
2. Describe the elements to record during the practicum.

Before undertaking the activities of Phase 3:

3. List their aptitudes, preferences and fields of interest with respect to the occupation.
4. Describe the requirements of the workplace.

