National Fire Academy

R0154 – Safety Program Operations
Version: 1st Edition, 5th Printing, October 2018
Quarter:
ACE Credit: In the upper division baccalaureate degree category, three semester hours in fire science, fire administration or risk management.
IACET Continuing Education Units: 4.4

Length of Course: 6 Days (41 hr., 40 min. contact hours, Sunday - Friday)
Prerequisite: Yes
Curriculum: Responder Health and Safety
Training Specialist: George Morgan
Instructor:
Instructor email/phone:
Classroom: J-
Meeting Time: 8 AM – 5 PM

Table of Contents

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Course Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary and Secondary Audience</td>
<td>Evaluation Procedures</td>
</tr>
<tr>
<td>Course Scope</td>
<td>Course Outline</td>
</tr>
<tr>
<td>Course Objectives</td>
<td>Policies</td>
</tr>
<tr>
<td>Course Delivery Method</td>
<td>Grading Rubrics</td>
</tr>
</tbody>
</table>

Course Description (Catalog)

R0154 – “Safety Program Operations.” This six-day course provides knowledge and practice in the context of current issues to develop strategies of risk management associated with the provision of firefighting and EMS services to reduce firefighter fatalities and injuries. With a focus on using the risk management model in the health and safety aspects of emergency services operations, current regulations, standards, policies and responsibilities for program management, day-to-day operations, and incident safety will be addressed.
**Student Qualifications (Primary and Secondary Audience)**

Company-level officers, chief officers, and supervisors who have department-level health and safety responsibilities (such as program planning and implementation) and who may serve as an Incident Safety Officer or department Health and Safety Officer.

**Course Scope (Goal)**

The goal of this course is to further that operational objective by providing participants with the knowledge, skills and abilities (KSAs) to develop strategies to manage risk associated with the provision of firefighting, EMS and special operations services that focus on the reduction of firefighter and emergency services fatalities and injuries.

The scope of SPO is by design very broad and affords ample opportunity to explore many health and safety areas and issues. The student is encouraged to expand the scope of any discussion to include specific problem areas or issues that have been encountered. Instructors have a responsibility to keep the course on track, but also have the leeway to meet the needs of individual classes. However, coverage of an unplanned topic may require after-hours discussion to complete.

**Course Objectives (Course Learning Outcomes – TLOs)**

After successfully completing this course, you will be able to accomplish the following:

- Describe the scope of the national firefighter fatality and injury problem.
- Describe the goal and apply the steps involved in instituting a risk management program.
- Describe the responsibilities of all fire/Emergency Medical Services (EMS) agency personnel relating to safety and health.
- Identify and describe the regulations, standards and policies that affect fire/Emergency Medical Services (EMS) agency personnel safety.
- Determine emergency responder health and wellness issues in relationship to existing standards, best practices and department issues.
- Explain the importance of and describe the methodology used in investigating near misses, mishaps, injuries and death.
- Explain and apply risk management principles to emergency situations.
- Identify specific hazards and conditions that present increased risk to fire/Emergency Medical Services (EMS) personnel and discuss general mitigation strategies to reduce the frequency and severity of fire/EMS personnel injuries.
- Discuss the importance of and describe the appropriate methodology for an After Action Review (AAR).
Course Delivery Method

The National Fire Academy (NFA) offers specialized training courses and advanced management programs of national impact in an academic classroom environment on campus at the National Emergency Training Center (NETC) in Emmitsburg, Maryland. This classroom course is designed for the national level fire service officer from State and local fire service organizations. During this 6-day delivery, students will reside in dormitories provided on campus with classes conducted in classrooms designed for critical student/instructor interaction. All course materials are designed for interactive classroom environments, in either paper notebook or electronic formats.
**Course Schedule**

The purpose of the course schedule is to give you, at a glance, the required preparation, activities, and evaluation components of your course.

<table>
<thead>
<tr>
<th>DAY 1</th>
<th>DAY 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro: Welcome and Introductions</td>
<td>Unit 2: Risk Management Process (cont’d)</td>
</tr>
<tr>
<td><strong>Break</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>Intro: Welcome and Introductions (cont’d)</td>
<td>Unit 2: Risk Management Process (cont’d)</td>
</tr>
<tr>
<td><strong>Break</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>Unit 1: The Firefighter Fatality and Injury Problem</td>
<td>Unit 2: Risk Management Process (cont’d)</td>
</tr>
<tr>
<td></td>
<td>Unit 3: Safety Responsibilities</td>
</tr>
<tr>
<td><strong>Lunch Break</strong></td>
<td><strong>Lunch Break</strong></td>
</tr>
<tr>
<td>Unit 1: The Firefighter Fatality and Injury Problem (cont’d)</td>
<td>Unit 3: Safety Responsibilities (cont’d)</td>
</tr>
<tr>
<td><strong>Break</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>Unit 2: Risk Management Process</td>
<td>Unit 3: Safety Responsibilities (cont’d)</td>
</tr>
<tr>
<td>Unit 4: Regulations, Standards and Policies</td>
<td>Discussion of current issues</td>
</tr>
<tr>
<td></td>
<td>LRC Orientation</td>
</tr>
</tbody>
</table>

Note: This schedule is subject to modification by the instructors and approved by the training specialist.
<table>
<thead>
<tr>
<th>DAY 3</th>
<th>DAY 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 4: Regulations, Standards</td>
<td>Unit 6: Investigations (cont’d)</td>
</tr>
<tr>
<td>and Policies (cont’d)</td>
<td></td>
</tr>
<tr>
<td><strong>Break</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>Unit 4: Regulations, Standards</td>
<td>Unit 7: Operational Risk</td>
</tr>
<tr>
<td>and Policies (cont’d)</td>
<td>Management (cont’d)</td>
</tr>
<tr>
<td><strong>Break</strong></td>
<td></td>
</tr>
<tr>
<td>Unit 5: Health and Wellness</td>
<td>Unit 7: Operational Risk</td>
</tr>
<tr>
<td></td>
<td>Management (cont’d)</td>
</tr>
<tr>
<td><strong>Lunch Break</strong></td>
<td><strong>Lunch Break</strong></td>
</tr>
<tr>
<td>Unit 5: Health and Wellness (cont’d)</td>
<td>Unit 7: Operational Risk Management (cont’d)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Break</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>Unit 5: Health and Wellness (cont’d)</td>
<td>Unit 8: Situation-specific Hazards and Mitigation Strategies</td>
</tr>
<tr>
<td>Unit 6: Investigations</td>
<td>Work on outline for Activity 2.3: Emerging Issues Risk Management Plan</td>
</tr>
<tr>
<td>Discussion of current issues</td>
<td></td>
</tr>
<tr>
<td>DAY 5</td>
<td>DAY 6</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Unit 8: Situation-specific Hazards and Mitigation Strategies (cont’d)</td>
<td>Activity 2.3: Emerging Issues Risk Management Plan Student Presentations</td>
</tr>
<tr>
<td><strong>Break</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>Unit 8: Situation-specific Hazards and Mitigation Strategies (cont’d)</td>
<td>Activity 2.3: Emerging Issues Risk Management Plan Student Presentations (cont’d)</td>
</tr>
<tr>
<td><strong>Break</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>Unit 9: After Action Review</td>
<td>Activity 2.3: Emerging Issues Risk Management Plan Student Presentations (cont’d)</td>
</tr>
<tr>
<td><strong>Lunch Break</strong></td>
<td><strong>Lunch Break</strong></td>
</tr>
<tr>
<td>Unit 9: After Action Review (cont’d)</td>
<td>Final Written Examination</td>
</tr>
<tr>
<td><strong>Break</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>Work on outline for Activity 2.3: Emerging Issues Risk Management Plan (cont’d)</td>
<td>Graduation</td>
</tr>
</tbody>
</table>
Course Resources (Instructional Materials)

In order to be fully prepared, obtain a copy of the required textbooks and other instructional materials prior to the first day of class.

Required Readings

The student must complete required readings during the course to be able to thoughtfully participate in discussions and activities.

None.

Suggested Reading/Resources

Suggested readings and resources are not evaluated, but may enhance the student’s understanding, serve as additional sources for citation and promote discussion of course material.

Required Resources (Course Textbook)

Student Manual.

Supplemental Resources (Supplemental Course Textbook)

None.

Grading Methodology (Evaluation Procedures)

The required performance to successfully complete the course is attained by completing the examination with a grade of “C” or better.

Required Reading Assignments

Student completion of reading assignments will be done via evaluation of their class participation and will not be a separately graded activity.

Suggested Readings

Suggested readings are not evaluated, but may enhance the student’s understanding and promote discussion of course material.
Course Outline

Unit 1: The Firefighter Fatality and Injury Problem (Day 1)

Objectives

Terminal Objective

The students will be able to:

1.1 Describe the scope of the national firefighter fatality and injury problem.

Enabling Objectives

The students will be able to:

1.1 Identify the most common causes of firefighter deaths during the past decade.
1.2 Identify the most common causes of firefighter injuries during the past decade.
1.3 List the criteria for line-of-duty deaths (LODDs).
1.4 Describe the correlation between the 16 Life Safety Initiatives and firefighter deaths and injuries.
1.5 Analyze a given case study to determine factors contributing to a fatality.

Unit 2: Risk Management Process (Day 1)

Objectives

Terminal Objective

The students will be able to:

2.1 Describe the goal and apply the steps involved in instituting a risk management program.

Enabling Objectives

The students will be able to:

2.1 Identify and discuss risk management and the necessity for fire and Emergency Medical Services (EMS) departments to do risk management.
2.2 Identify the methods of detecting risk within a department.
2.3 Identify risks (current and potential) involved in both emergency and nonemergency operations.

2.4 Discuss the liability issues related to organizational risks.

2.5 Identify documentation necessary to support/defend the risk management program.

2.6 Use the risk management process to analyze and develop a plan for managing three emerging risks within the student’s organization.

2.7 Present to the class a plan outline to deal with an emerging health and safety issue (Day Six project).

Unit 3: Safety Responsibilities (Day 2)

Objectives

Terminal Objective

The students will be able to:

3.1 Describe the responsibilities of all fire/Emergency Medical Services (EMS) agency personnel relating to safety and health.

Enabling Objectives

The students will be able to:

3.1 Describe the Incident Command System (ICS) and the place of the Incident Safety Officer (ISO) within that system.

3.2 Describe the role and responsibilities of:

- Fire/EMS Chief or Agency Director.
- ISO.
- Health and Safety Officer (HSO).
- Command Officer.
- Company Officer (CO).
- Firefighter/Emergency medical technician (EMT).
- Safety Committee.
3.3 Discuss the importance of clear and accurate communications between all levels of the department as they relate to safety.

3.4 Identify safe and unsafe practices, given a visual scenario.

Unit 4: Regulations, Standards and Policies (Day 2)

Objectives

Terminal Objective

The students will be able to:

4.1 Identify and describe the regulations, standards and policies that affect fire/Emergency Medical Services (EMS) agency personnel safety.

Enabling Objectives

The students will be able to:

4.1 Compare and contrast the following terminology:
   - Regulation.
   - Standard.
   - Policy.

4.2 Identify and explain the impact of regulations, standards and policies that directly affect fire/EMS agency personnel safety.

4.3 Describe the recommendations contained within National Fire Protection Association (NFPA) 1500 and NFPA 1521.

4.4 Given a scenario, research, review and apply an actual law, standard or regulation to a given risk of emergency operations.
Unit 5: Health and Wellness (Day 3)

Objectives

Terminal Objective

The students will be able to:

5.1 Determine emergency responder health and wellness issues in relationship to existing standards, best practices and department issues.

Enabling Objectives

The students will be able to:

5.1 Identify and discuss the components of a comprehensive firefighter/Emergency Medical Services (EMS) personnel health and wellness program.

5.2 Discuss confidentiality in relation to a health and wellness program.

5.3 Identify and describe the regulations and standards that apply to firefighter/EMS personnel health and wellness.

5.4 Describe the effect of sleep deprivation on fire/EMS responders.

5.5 Identify, describe and discuss issues dealing with the mental health and suicide of fire/EMS responders.

5.6 Conduct an analysis to determine factors that would affect the implementation of a health and wellness program in a fire/EMS department.

Unit 6: Investigations (Day 3)

Objectives

Terminal Objective

The students will be able to:

6.1 Explain the importance of and describe the methodology used in investigating near misses, mishaps, injuries and death.
Enabling Objectives

The students will be able to:

6.1 Identify situations that merit investigation.

6.2 Describe the need for proper investigation of mishaps, fire/Emergency Medical Services (EMS) personnel injuries, and deaths.

6.3 Identify resources and outside agencies that can assist with investigations.

6.4 Identify the need to document near-miss incidents and describe the International Association of Fire Chiefs’ (IAFC) near-miss reporting process.

6.5 Identify and discuss issues related to the initial stages of the investigation of a specific accident or near-miss incident.

Unit 7: Operational Risk Management (Day 4)

Objectives

Terminal Objective

The students will be able to:

7.1 Explain and apply risk management principles to emergency situations.

Enabling Objectives

The students will be able to:

7.1 Identify and describe the use of an emergency risk management plan.

7.2 Describe the use of Geographic Information System (GIS) in emergency risk management.

7.3 Identify risk concerns for selected all-hazards events and incidents.

7.4 Given a video scenario, use the Naturalistic Decision Making (NDM) process to apply the emergency risk management plan to the following situations:
   - Immediate risks.
   - Forecasted risks.

7.5 Complete an Incident Action Plan (IAP) — Safety Analysis Form.
Unit 8: Situation-specific Hazards and Mitigation Strategies (Day 4)

Objectives

Terminal Objective

The students will be able to:

8.1 Identify specific hazards and conditions that present increased risk to fire/Emergency Medical Services (EMS) personnel and discuss general mitigation strategies to reduce the frequency and severity of fire/EMS personnel injuries.

Enabling Objectives

The students will be able to:

The students will be able to:

8.1 Discuss the risks associated with:
   - Abandoned building operations.
   - Hazardous materials/Terrorism.
   - Technical rescue.
   - Highway operations.
   - Incidents involving violence.
   - Wildland fires.
   - Weather-related issues.
   - Pandemic influenza.

8.2 Discuss the application of specific mitigation strategies, including Rapid Intervention Crews (RICs), personnel accountability system, and emergency incident rehabilitation.

8.3 Describe the Crew Resource Management (CRM) concept and its implications on emergency operations.

8.4 Given a scenario, develop a policy or procedure with appropriate support material.
Unit 9: After Action Review (Day 5)

Objectives

Terminal Objective

The students will be able to:

9.1 Discuss the importance of and describe the appropriate methodology for an After Action Review (AAR).

Enabling Objectives

The students will be able to:

9.1 Describe the AAR process.

9.2 Describe the roles of students, specifically the Incident Safety Officer (ISO) and the Health and Safety Officer (HSO) in the AAR process.

9.3 Define the outcome applications of the AAR.

9.4 Given a scenario, determine what safety issues should be addressed in the AAR and develop an improvement plan.

Policies

Class Attendance and Cancellation Policy

Attendance

- You are required to attend all sessions of the course. If you do not, you may not receive a certificate, and your stipend may be denied.

- If you need to depart campus early and miss any portion of the course and/or graduation, you must make the request in writing to the NFA training specialist. The training specialist, in collaboration with the superintendent, may waive the attendance requirement in order to accommodate you with extraordinary circumstances as long as you complete all course requirements. If you receive approval for departing early, you must forward the approval to the Admissions Office so your stipend reimbursement is not limited.

Student Substitutions

Substitutions for NFA courses are made from waiting lists; your fire department can’t send someone in your place.
**Cancellations or No-Shows**

NFA’s mission for delivery of courses is impaired significantly by cancellations and no-shows. It is very difficult and costly to recruit students at the last minute. Currently there is a two-year ban on student attendance for students who are no-shows or cancel within 30 days of the course start date without a valid reason. If you receive such a restriction, your supervisor needs to send a letter to our Admissions Office explaining the cancellation/no-show.

**Course Failure**

If you fail an on-campus course, you will not be issued a stipend for that course. You can reapply for the failed course or any other NFA course and go through the random selection process. You don’t have to successfully complete the failed course before attending another NFA course.

**Student Code of Conduct Policy**

Students, instructors and staff are expected to treat each other with respect at all times. Inappropriate behavior will not be tolerated and may result in removal from campus and denial of stipends.

**Writing Expectations**

Student writing will conform to the generally accepted academic standards for college papers. Papers will reflect the original work of the student and give appropriate credit through citations for ideas belonging to other authors, publications or organizations. Student written work should be free of grammatical and syntax errors, free of profanity or obscene language or ideas, and reflect critical thinking related to the course subject matter.

**Citation and Reference Style**

Attention Please: Students will follow the APA, Sixth Edition as the sole citation and reference style used in written work submitted as part of coursework to NFA. Assignments completed in a narrative essay, composition format, abstract, and discussion posts must follow the citation style cited in the APA, Sixth Edition.

**Late Assignments**

Students are expected to submit classroom assignments by the posted due date (11:59 p.m. EDT/EST) and to complete the course according to the published class schedule. As adults, students, and working professionals, you must manage competing demands on your time. Discussion board postings submitted within 3 days after the submission deadline will receive up to a 20% deduction. Those that do not submit their discussion board postings within this timeline will receive a “0” grade for the week. Final assignment papers will not be accepted after the deadline. Any paper submitted after the deadline will receive a “0” grade for that assignment.
Netiquette

Online learning promotes the advancement of knowledge through positive and constructive debate – both inside and outside the classroom. Forums on the Internet, however, can occasionally degenerate into needless insults and “flaming.” Such activity and the loss of good manners are not acceptable in a professional learning setting – basic academic rules of good behavior and proper “Netiquette” must persist. Remember that you are in a place for the rewards and excitement of learning which does not include descent to personal attacks or student attempts to stifle the forum of others.

- Technology Limitations. While you should feel free to explore the full-range of creative composition in your formal papers, keep e-mail layouts simple. The NFA Online classroom may not fully support MIME or HTML encoded messages, which means that bold face, italics, underlining, and a variety of color-coding or other visual effects will not translate in your e-mail messages.

- Humor Note. Despite the best of intentions, jokes and especially satire can easily get lost or taken seriously. If you feel the need for humor, you may wish to add “emoticons” to help alert your readers: ;-), : ), ☺.

Disclaimer Statement

Course content may vary from the outline to meet the needs of this particular group.

Grading

Please review the following rubrics that explain how grades will be awarded.

Students who do not complete the entire course will be awarded an Incomplete (I) grade. In accordance with National Fire Academy academic policies, an Incomplete (I) grade must be removed by the end of the next semester following the course, or it automatically becomes a Failing (F) grade.

If you fail an on-campus course, you will not be issued a stipend for that course. You can reapply for the failed course or any other NFA course and go through the random selection process. You don’t have to successfully complete the failed course before attending another NFA course.

https://www.usfa.fema.gov/training/nfa/admissions/student_policies.html

Academic Honesty

Students are expected to exhibit exemplary ethical behavior and conduct as part of the NFA community and society as a whole. Acts of academic dishonesty including cheating, plagiarism, deliberate falsification, and other unethical behaviors will not be tolerated.

Students are expected to report academic misconduct when they witness a violation. All cases of academic misconduct shall be reported by the instructor to the Training Specialist.
If a student is found to have engaged in misconduct and the allegations are upheld, the penalties may include, but are not limited to one or a combination of the following:

- expulsion,
- withholding of stipend or forfeiture of stipend paid,
- exclusion from future classes for a specified period; depending on the severity it could range from 1-10 years, and/or
- forfeiture of certificate for course(s) enrolled in at NETC.

Refer to NFA-specific Standard Operating Procedure 700.1 – *Academic Code of Conduct and Ethics* for more information.
Grading Rubrics

Activity 2.3 Grade Sheet

Student’s Name: ____________________________

Course Date: ______________________________

<table>
<thead>
<tr>
<th>Meets expectations</th>
<th>Minor recommendations</th>
<th>Significant recommendations</th>
<th>Incomplete</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>8</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Technical Content

1. Identify three emerging issues in your department for the plan.

2. Identify the probabilities improving safety in your department based on what you have learned in this class.

3. Identify probable consequences if they occur (consider effects on human resources).

4. Identify any known national experience with the emerging issues or risks identified.

Presentation Time (minutes) 4 to 6 3 or 7 2 or 8 1 or 9 0 or over 9

The student’s presentation was 4-6 minutes.

Comments/Recommendations: ____________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

(continue on reverse if necessary)

Instructor: ____________________________  Instructor: ____________________________