



National Fire Academy

R0614 – Wildland Urban Interface: Fire-Adapted Communities
Version: 1st Edition, 3rd Printing, October 2019
Quarter:

ACE Credit: In the lower division baccalaureate/associate degree category, three semester hours in fire science, fire prevention, or public policy.

IACET Continuing Education Units: 3.8

Length of Course: 6 Days (38 hr., 10 min. contact hours, Sunday – Friday)

Prerequisite: Yes

Curriculum: Fire Prevention: Technical and Wildland Urban Interface

Training Specialist: Mike Weller

Instructor:

Instructor email/phone:

Classroom: J-

Meeting Time: 8 AM - 5 PM

Table of Contents

Course Description	Course Resources
Primary and Secondary Audience	Evaluation Procedures
Course Scope	Course Outline
Course Objectives	Policies
Course Delivery Method	Grading Rubrics

Course Description (Catalog)

R0614 – "Wildland Urban Interface: Fire-Adapted Communities." This is a six-day course for people who have organizational responsibility for wildland urban interface (WUI) risk-reduction operations in their agency or jurisdiction. The course will provide students with the ability to create and sustain a fire-adapted community (FAC) located within a WUI.

Course outcomes will include:

• Develop a local community coalition to address the WUI and create FACs.

- Create a Community Wildfire Protection Plan.
- Facilitate partnerships, improve networking and enhance resource allocation abilities that address WUI fire risks/issues.
- Prefire communication and planning between government agencies, local jurisdictions and the community at large is essential in creating an FAC.
- Improve quality of life and vitality within the local community.

Student Qualifications (Primary and Secondary Audience)

The target audience for this course includes, but is not limited to, the following:

- Fire and emergency service representatives.
- Community leaders/decision-makers.
- Commissioners, elected officials and other local policymakers.
- Code officials: building, planning, etc.
- Environmental groups.
- Land managers and foresters.
- Other key local stakeholders.

Course Scope (Goal)

The goal of the course is to empower students with the ability to create and sustain a fire-adapted community (FAC) located within a wildland urban interface (WUI). Students will learn how to convene a community coalition that will suggest the use of broad-based fire mitigation strategies, resulting in the development of a Community Wildfire Protection Plan (CWPP).

Course Objectives (Course Learning Outcomes – TLOs)

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

- Articulate the benefits of developing a fire-adapted community (FAC) within the wildland urban interface (WUI).
- Develop a local community coalition to facilitate creation of a fire-adapted community (FAC) in the wildland urban interface (WUI).
- Construct an effective wildland urban interface (WUI) risk profile for their community.
- Develop a draft action plan to initiate development of a fire-adapted community (FAC).
- Select applicable fire-adapted community (FAC) mitigation strategies to include in a Community Wildfire Protection Plan (CWPP) for the local community.
- Identify how technical tools that support development of a fire-adapted community (FAC) can be used in their locality.
- Illustrate how to develop, implement and sustain a Community Wildfire Protection Plan (CWPP) in support of a fire-adapted community (FAC) initiative.

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.

DAY 1	DAY 2			
Introduction, Welcome and Administrative	Module 1 Unit 3: Risk Assessment			
Break	Break			
Module 1 Unit 1: A Call to Action	Activity 1.3.1: Wildland Urban Interface Hazard Attributes			
Activity 1.1.1: Understanding Regional Wildland Fire Management Issues	Module 1 Unit 3: Risk Assessment (cont'd)			
Break	Break			
	Activity 1.3.2: Basics of a Wildland Urban Interface Fire Risk Assessment			
Module 1 Unit 1: A Call to Action (cont'd)	Module 1 Unit 3: Risk Assessment (cont'd)			
	Activity 1.3.3: Sources of Data to Support a Wildland Urban Interface Fire Risk Assessment			
Lunch	Lunch			
Activity 1.1.2: A Call to Local Action for a Fire-Adapted Community	Module 1 Unit 3: Risk Assessment (cont'd)			
Module 1 Unit 2: Fire-Adapted Community Leadership	Module 1 Unit 4: Creating an Action Plan			
Break	Break			
Module 1 Unit 2: Fire-Adapted Community Leadership (cont'd)				
Activity 1.2.1: Identifying Local Champions for a Fire-Adapted Community	Module 1 Unit 4: Creating an Action Plan (cont'd) Activity 1.4.1: Creating an Action Plan to Initiate Creation of a Fire-Adapted Community			
Activity 1.2.2: Identifying the Political Issues Surrounding the Local Wildland Fire Problem				
Activity 1.2.3: Building a Fire-Adapted Community Coalition	Day 2 Homawork			

Day 1 Homework:

A. Read Lakeshore Case Study.

Day 2 Homework:

B. Study for Module 1 Exam.

C. Work on Activity 1.4.1.

DAY 3	DAY 4		
Administer Module 1 Examination Module 2 Unit 1: Mitigation Strategies	Activity 2.1.4: Putting It All Together — Wildland Urban Interface Mitigation Strategies		
Break	Break		
Module 2 Unit 1: Mitigation Strategies (cont'd) Activity 2.1.1: Mitigation Strategies for the Natural Environment	Module 2 Unit 2: Technical Tools to Support Fire-Adapted Communities		
Break	Break		
Module 2 Unit 1: Mitigation Strategies (cont'd)	Activity 2.2.1: Using Building and Planning Codes		
Activity 2.1.2: Mitigation Strategies for the Built Environment	Module 2 Unit 2: Technical Tools to Support Fire-Adapted Communities (cont'd)		
Lunch	Lunch		
Module 2 Unit 1: Mitigation Strategies (cont'd)	Activity 2.2.2: Use of Wildland Fire Preplans Module 2 Unit 2: Technical Tools to Support Fire-Adapted Communities (cont'd)		
Break	Break		
Module 2 Unit 1: Mitigation Strategies (cont'd) Activity 2.1.3: Mitigation Strategies for the Social Environment	Module 2 Unit 2: Technical Tools to Support Fire-Adapted Communities (cont'd)		
Day 3 Homework: D. Read "Lessons Learned from Waldo Canyon" in Appendix B of Module 2 Unit 1. Each group is assigned a mitigation environment to report on as part of Activity 2.1.4.	Day 4 Homework: E. Submit Activity 1.4.1 for a grade. F. Study for Module 2 Examination.		

DAY 5	DAY 6		
Administer Module 2 Examination Module 3 Unit 1: Developing, Implementing and Sustaining a Community Wildfire Protection Plan	Activity 3.1.3: Implementing the Community Wildfire Protection Plan		
Break	Break		
Module 3 Unit 1: Developing, Implementing and Sustaining a Community Wildfire Protection Plan (cont'd)	Module 3 Unit 1: Developing, Implementing and Sustaining a Community Wildfire Protection Plan (cont'd)		
Break	Break		
Module 3 Unit 1: Developing, Implementing and Sustaining a Community Wildfire Protection Plan (cont'd) Activity 3.1.1: Developing a Draft Community Wildfire Protection Plan	Activity 3.1.4: Sustaining the Community Wildfire Protection Plan		
Lunch	Lunch		
Module 3 Unit 1: Developing, Implementing and Sustaining a Community Wildfire Protection Plan (cont'd)	Module 3 Unit 1: Developing, Implementing and Sustaining a Community Wildfire Protection Plan (cont'd)		
Break	Break		
Activity 3.1.2: Developing Informed Consent Module 3 Unit 1: Developing, Implementing and Sustaining a Community Wildfire Protection Plan (cont'd)	Administer Module 3 Examination Course Evaluation		

Day 5 Homework: G. Study for Module 3 Examination.

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.

Lakeshore Case Study

"Lessons Learned from Waldo Canyon"

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.

None.

Required Resources (Course Textbook)

Student Manual.

Supplemental Resources (Supplemental Course Textbook)

None.

Grading Methodology (Evaluation Procedures)

Each module will be assessed by a 25-question examination. For six-day deliveries, there will also be one activity graded through the use of an evaluation rubric.

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

Introduction (Day 1)

Module 1 Unit 1: A Call to Action (Day 1)

Objectives

Terminal Objective

The students will be able to:

1.1.1 Articulate the benefits of developing a fire-adapted community (FAC) within the wildland urban interface (WUI).

Enabling Objectives

The students will be able to:

- 1.1.1 Characterize the WUI fire problem.
- 1.1.2 Identify the elements of an FAC.
- 1.1.3 Describe what is needed to make their local jurisdiction an FAC in the WUI.
- 1.1.4 Describe how to initiate a local "call for action."

Module 1 Unit 2: Fire-Adapted Community Leadership (Day 1)

Objectives

Terminal Objective

The students will be able to:

1.2.1 Develop a local community coalition to facilitate creation of a fire-adapted community (FAC) in the wildland urban interface (WUI).

Enabling Objectives

The students will be able to:

- 1.2.1 Describe the values and characteristic behaviors of champions.
- 1.2.2 Explain the political issues that often surround the wildland fire problem in a community.

- 1.2.3 Define how to facilitate building partnerships and coalitions to support creation of an FAC.
- 1.2.4 Construct a list of stakeholders/partners that can help facilitate creation of an FAC.

Module 1 Unit 3: Risk Assessment (Day 2)

Objectives

Terminal Objective

The students will be able to:

1.3.1 Construct an effective wildland urban interface (WUI) risk profile for their community.

Enabling Objectives

The students will be able to:

- 1.3.1 Explain the purpose of a community risk assessment.
- 1.3.2 Describe the elements of a WUI fire risk assessment.
- 1.3.3 Classify levels of risk analysis.
- 1.3.4 Determine sources of data to support a WUI fire risk assessment.
- 1.3.5 Review a draft risk assessment template to support completion of a local WUI fire risk assessment.

Module 1 Unit 4: Creating an Action Plan (Day 2)

Objectives

Terminal Objective

The students will be able to:

1.4.1 Develop a draft action plan to initiate development of a fire-adapted community (FAC).

Enabling Objectives

The students will be able to:

- 1.4.1 Describe the purpose of an action plan.
- 1.4.2 Analyze the key elements of an action plan to initiate creation of an FAC.

Module 2 Unit 1: Mitigation Strategies (Day 3)

Objectives

Terminal Objective

The students will be able to:

2.1.1 Select applicable fire-adapted community (FAC) mitigation strategies to include in a Community Wildfire Protection Plan (CWPP) for the local community.

Enabling Objectives

The students will be able to:

- 2.1.1 Describe how a CWPP supports the primary elements of an FAC.
- 2.1.2 Categorize the five types of mitigation strategies.
- 2.1.3 Suggest mitigation strategies that may be integrated into a CWPP.

Module 2 Unit 2: Technical Tools to Support Fire-Adapted Communities (Day 4)

Objectives

Terminal Objective

The students will be able to

2.2.1 Identify how technical tools that support development of a fire-adapted community (FAC) can be used in their locality.

Enabling Objectives

The students will be able to:

- 2.2.1 Give examples of how national codes and standards can be integrated into a Community Wildfire Protection Plan (CWPP) to support an FAC.
- 2.2.2 Describe the technical tools that can be used to support a CWPP and FAC initiative.
- 2.2.3 Explain how fire modeling technology can be used to support a CWPP and FAC initiative.
- 2.2.4 Articulate how to integrate a wildland fire preplan into a CWPP.

2.2.5 Discuss strategies that other communities are using to mitigate wildland fire and develop FACs.

Module 3 Unit 1: Developing, Implementing and Sustaining a Community Wildfire Protection Plan (Day 5)

Objectives

Terminal Objective

The students will be able to:

3.1.1 Illustrate how to develop, implement and sustain a Community Wildfire Protection Plan (CWPP) in support of a fire-adapted community (FAC) initiative.

Enabling Objectives

The students will be able to:

- 3.1.1 Describe the three key components of a CWPP required by the Healthy Forests Restoration Act (HFRA).
- 3.1.2 Identify four additional components of a comprehensive CWPP.
- 3.1.3 Describe the four processes involved in obtaining final approval of a CWPP.
- 3.1.4 Summarize the key factors involved in implementing a CWPP.
- 3.1.5 Explain the eight elements involved in sustaining a CWPP in support of an FAC.
- 3.1.6 Describe the role and importance of a CWPP as an integral element of an FAC.

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 <u>especially</u> 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.

http://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

INSTRUCTOR'S GRADING GUIDE WITH STUDENT ACTIVITY SCORING PLAN

Grading Structure and Rubrics by Student Activity With Individual Student Score Guide

Activity 1.4.1		25 points
Module 1 Examination		25 points
Module 2 Examination		25 points
Module 3 Examination		25 points
	Total	100 points

Instructions for Application of Student Activity Scoring Plan

- 1. All students must receive a fair score reflecting their efforts to complete Activity 1.4.1.
- 2. Students are to receive the Scoring Dimensions Guide for Activity 1.4.1. Refer the students to the SM boilerplate.
- 3. Explain to the students the Scoring Dimensions Guide. Provide the questions, core concepts to be addressed for the questions, and how the points will be allocated. This is what the instructors will use to grade the culminating activity. Instructors should spend adequate time on the guide and ascertain that students understand the grading process.
- 4. Upon completion of Activity 1.4.1, each student will submit the scoring guide and the word processed activity to the instructor for scoring each student's performance.
- 5. Once a point selection is determined for the student's score, the instructor will record that point on the student's scoring guide and on the Class Grade Sheet and return the student's individual scoring guide to the student.
- 6. At the completion of the course, the instructors will tally each student's grades for the three examinations and Activity 1.4.1. Points equate to the following grades:
 - A 90-100 B 80-89 C 70-79 D 60-69
- 7. Instructors are to record grades, sign, date and then deliver the completed Class Grade Sheet to the NFA training specialist.

CLASS GRADE SHEET

(highest	Class Granumber of points availal	Class Grade Sheet (highest number of points available on each examination/activity)	n/activity)		
	Activity 1.4.1: Creating an Action Plan to Initiate Creation of a Fire- Adapted Community	Module 1 Examination 25 points	Module 2 Examination 25 points	Module 3 Examination 25 points	Final Course Score 100 points
Students:	25 points				

ACTIVITY 1.4.1 SCORING DIMENSIONS GUIDE

		0 Points Poor	3 Points Fair	4 Points Good	5 Points Excellent	Total Points
1.	Name five champions and how they will be identified and engaged.	The student did not attempt this task.	The student provided an explanation; however, it was unclear.	The student provided a generally sound explanation.	The student provided an explanation that was exemplary, using key concepts presented in the course.	
2.	Name six stakeholders/partners and how they will be identified and engaged.	The student did not attempt this task.	The student provided an explanation; however, it was unclear.	The student provided a generally sound explanation.	The student provided an explanation that was exemplary, using key concepts presented in the course.	
3.	Explain how a community WUI fire risk assessment will be completed, who will participate, what methodology will be used, and the attributes that will be assessed.	The student did not attempt this task.	The student provided an explanation; however, it was unclear.	The student provided a generally sound explanation.	The student provided an explanation that was exemplary, using key concepts presented in the course.	
4.	Explain how a "call to action" will be facilitated among a broader audience of local stakeholders and decision-makers.	The student did not attempt this task.	The student provided an explanation; however, it was unclear.	The student provided a generally sound explanation.	The student provided an explanation that was exemplary, using key concepts presented in the course.	
5.	Explain how success will be measured; identify any potential barriers to success and how you plan to overcome them.	The student did not attempt this task.	The student provided an explanation; however, it was unclear.	The student provided a generally sound explanation.	The student provided an explanation that was exemplary, using key concepts presented in the course.	

Total Points: