

Submit originals (including syllabus) and one copy and electronic copy to the **Faculty Senate Office**
 See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/> for a complete description of the rules governing curriculum & course changes.

CHANGE COURSE (MAJOR) and DROP COURSE PROPOSAL
 Attach a syllabus, except if dropping a course.

SUBMITTED BY:

Department	Emergency Services: Fire Science	College/School	CRCD – CTC
Prepared by	John George	Phone	907-455-2853
Email Contact	jgeorge@alaska.edu	Faculty Contact	John George

1. COURSE IDENTIFICATION: As the course now exists.

Dept	FIRE	Course #	F155	No. of Credits	2.0
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COURSE TITLE FIRE F155 Wildland Fire Behavior

2. ACTION DESIRED: Changes to be made to the existing course.

Change Course If Change, indicate below what change. Drop Course

NUMBER		TITLE	<input checked="" type="checkbox"/>	DESCRIPTION	<input checked="" type="checkbox"/>
PREREQUISITES		FREQUENCY OF OFFERING			
CREDITS (including credit distribution)	2+0	COURSE CLASSIFICATION			
CROSS-LISTED		Dept. <input style="width: 40px;" type="text"/>		(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)	
STACKED (400/600) Include syllabi.		Dept. <input style="width: 40px;" type="text"/>		Course # <input style="width: 60px;" type="text"/>	
OTHER (please specify)	Revise curriculum to match wildfire industry request.				

3. COURSE FORMAT

NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school's curriculum council and the appropriate Faculty Senate curriculum committee. Furthermore, any core course compressed to less than six weeks must be approved by the core review committee.

COURSE FORMAT: 1 2 3 4 5 6 weeks to full semester
 (check **all** that apply)

OTHER FORMAT (specify all that apply)

Mode of delivery (specify lecture, field trips, labs, etc) Lecture

4. COURSE CLASSIFICATIONS: (undergraduate courses only. Use approved criteria found on Page 10 & 17 of the manual. If justification is needed, attach on separate sheet.)

H = Humanities S = Social Sciences

Will this course be used to fulfill a requirement for the baccalaureate core? YES NO

IF YES, check which core requirements it could be used to fulfill:

O = Oral Intensive, Format 6 also submitted W = Writing Intensive, Format 7 submitted Natural Science, Format 8 submitted

5. COURSE REPEATABILITY:

Is this course repeatable for credit? YES NO

Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).

How many times may the course be repeated for credit? TIMES

If the course can be repeated with variable credit, what is the maximum number of credit hours that may be earned for this course? CREDIT HOURS

6. **CURRENT CATALOG DESCRIPTION AS IT APPEARS IN THE CATALOG:** including dept., number, title and credits

FIRE F155 Wildland Fire Behavior

3 Credits

Offered Spring Odd-numbered Years

Fire behavior knowledge necessary to determine basic input data for fire behavior calculations such as rate of spread, fire line intensity, flame length and area/perimeter growth using fire behavior prediction systems. Prepare fire perimeter maps, assess and predict chances of extreme fire behavior conditions, assess fire line data and fire behavior estimations, identify fire suppression limitations, and make recommendations for fire line location and safe control tactics. Prerequisites: FIRE F151 or permission of instructor. (3+0)

7. **COMPLETE CATALOG DESCRIPTION AS IT WILL APPEAR WITH THESE CHANGES:** (Underline new wording strike through old wording and use complete catalog format including dept., number, title, credits and cross-listed and stacked.)
PLEASE SUBMIT NEW COURSE SYLLABUS. For stacked courses the syllabus must clearly indicate differences in required work and evaluation for students at different levels.

FIRE F155 Wildland Fire Behavior I

3 2 Credits

Offered Spring Odd-numbered Years

This course is a classroom-based skills course designed to prepare the prospective fireline supervisor to undertake safe and effective fire management operations. It serves to develop fire behavior prediction knowledge and skills. Fire environment differences are discussed as necessary; instructor will stress local Alaskan conditions. Fire behavior knowledge necessary to determine basic input data for fire behavior calculations such as rate of spread, fire line intensity, flame length and area/perimeter growth using fire behavior prediction systems. Prepare fire perimeter maps, assess and predict chances of extreme fire behavior conditions, assess fire line data and fire behavior estimations, identify fire suppression limitations, and make recommendations for fire line location and safe control tactics. This course is based on a National Wildfire Coordinating Group (NWCG) course. Successful course completion combined with national age, physical fitness requirements, and appropriate experience as outlined by NWCG may qualify the student for an interagency fire certification.
Prerequisites: FIRE F151 or permission of instructor. (3+0)(2+0)

NWCG Course for F155:

S-290 Intermediate Wildland Fire Behavior

8. **IS THIS COURSE CURRENTLY CROSS-LISTED?**

YES/NO

No

If Yes, DEPT

NUMBER

(Requires written notification of each department and dean involved. Attach a copy of written notification.)

9. **GRADING SYSTEM:** Specify only one

LETTER

X

PASS/FAIL:

10. ESTIMATED IMPACT

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

No impact. Course update only.

11. LIBRARY COLLECTIONS

Have you contacted the library collection development officer (kljensen@alaska.edu, 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.

No Yes No library resources required

12. IMPACTS ON PROGRAMS/DEPTS:

*What programs/departments will be affected by this proposed action?
Include information on the Programs/Departments contacted (e.g., email, memo)*

No additional impact. Course update only.

13. POSITIVE AND NEGATIVE IMPACTS

Please specify positive and negative impacts on other courses, programs and departments resulting from the proposed action.

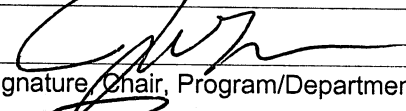
This update should allow more students to transfer credit in to UAF and to see a pathway between the AAS Wildfire Control and a career in wildland fire.


JUSTIFICATION FOR ACTION REQUESTED


The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. If you ask for a change in # of credits, explain why; are you increasing the amount of material covered in the class? If you drop a prerequisite, is it because the material is covered elsewhere? If course is changing to stacked (400/600), explain higher level of effort and performance required on part of students earning graduate credit. Use as much space as needed to fully justify the proposed change and explain what has been done to ensure that the quality of the course is not compromised as a result.

Updating this course will bring this course back in line with how the wildland fire industry offers National Wildfire Coordination Group (NWCG) courses. Some of the prior material offered in this course is no longer applicable to how courses are delivered within the NWCG. This change was requested by the wildland fire industry task force during their review of the AAS Wildland Fire Control degree.

APPROVALS: (Additional signature blocks may be added as necessary.)

 Date 10/4/12
Signature, Chair, Program/Department of: Emergency Services and Public Safety

 Date 11-19-12
Signature, Chair, College/School Curriculum Council for: CTC

 Date 11/19/12
Signature, Dean, College/School of: CTC

Signature of Provost (if applicable) _____ Date _____

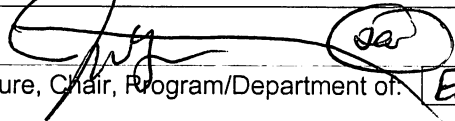
Offerings above the level of approved programs must be approved in advance by the Provost.

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE.

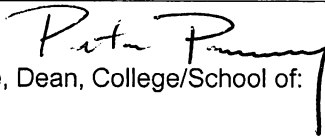
Signature, Chair, UAF Faculty Senate Curriculum Review Committee

Date _____

ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)

 Date _____
Signature, Chair, Program/Department of: Emergency Services ad

Signature, Chair, College/School Curriculum Council for: _____

 Date 12/3/12
Signature, Dean, College/School of: CRCD

**University of Alaska Fairbanks
Community and Technical College
Emergency Services Program
FIRE 155 – Wildland Fire Behavior I Blended-Learning
2.0 (2+0) Credits
Blended-Learning Course Syllabus**

Course Description:

This is a blended-learning knowledge course designed to prepare the prospective fireline supervisor to undertake safe and effective fire management operations. It serves to develop fire behavior prediction knowledge and skills. Fire environment differences are discussed as necessary; instructor will stress local conditions. This course is based on National Wildfire Coordinating Group (NWCG) courses.

NWGC Courses included: S-290 Intermediate Wildland Fire Behavior

Offered Spring

Course Goals:

Successful course completion combined with national age, physical fitness and appropriate experience requirements as administered by a federal or state wildland fire agency will qualify the student for interagency fire qualification certifications.

Prerequisites:

FIRE 151 or Instructor permission

Student Learning Outcomes:

The successful student will be able to:

- ❖ Identify and describe the characteristics of fuels, weather, and topography that influence wildland fire behavior.
- ❖ Describe the interaction of fuels, weather, and topography on wildland fire behavior, fireline tactics, and safety.
- ❖ Describe the causes of extreme fire behavior conditions that develop due to weather, fuels, and/or topography.
- ❖ Interpret, communicate, apply, and document wildland fire behavior and weather information.

Methods:

The course is blended-learning with lessons primarily online supplemented with classroom sessions covering special topics. Group discussion during classroom

sessions is strongly encouraged. Lesson completion, periodic quizzes and final examination will document student progress.

Instructor Qualifications:

The lead instructor must be NWCG qualified as a strike team leader or task force leader, or prescribed fire burn boss type 2. Successful completion of S-490 Advanced Fire Behavior Calculations is recommended.
Unit instructors must be NWCG qualified as single resource bosses.
A meteorologist is highly recommended to instruct the weather sections of this class.

Location and Meeting Times:

Room X, University Park Center, 1000 University Avenue
Date 1 through Date 2, Day of the week(s), Start Time – End Time

Grading Policy:

Average Score	Letter Grade
90 and above	A
80 to 89.99	B
70 to 79.99	C
60 to 69.99	D
0 to 59.99	F

Attendance and Participation:	20%
Unit Quizzes:	50%
Final Examination:	30%

Policies:

Attendance is required at all sessions with individual participation expected. Homework is due on specified dates. Late work will be accepted with penalty. Individual needs may be discussed. Academic integrity is expected and plagiarism is unacceptable.

UAF Honor Code

The public holds emergency services personnel accountable to the highest standards of ethics. The credibility of our degree program requires that we meet those expectations in every way possible. As a UAF student, you are subject to the Honor Code. The University assumes that the integrity of each student and the student body as a whole will be upheld. Honesty is a primary responsibility of you and every other UAF student. It is your responsibility to help maintain the integrity of the student community including the reporting any observed violations to the Instructor or Program Coordinator. UAF's Honor Code is as follows:

1. Students will not collaborate on any quizzes, in-class exams, or take-home assignments that will contribute to their grade in a course, unless permission is granted by the course instructor. Only those materials permitted by the instructor may be used to assist in quizzes and exams. The use of study groups is encouraged.
2. Students will not represent the work of others as their own. A student will attribute the source of information not original with himself or herself (direct quotes or paraphrases) in compositions, theses and other reports. (Specifically prohibited for this course are reports composed by other students from previous course offerings and any Internet sources.)
3. No work submitted for one course may be submitted for credit in another course without the explicit approval of both instructors. Students may use the same report topic and references from other courses if the Instructor is provided with a graded copy of any similar submissions to show that an identical report has not been submitted for credit twice.

Violations of the Honor Code will result in a failing grade for the assignment and for the course in which the violation occurred. Violations of the Honor Code may result in suspension or expulsion.

Disability Services:

The Office of Disability Services implements the Americans with Disability Act (ADA), and insures that UAF students have equal access to the campus and course materials. Your instructor will work with the Office of Disabilities Services (208 WHIT, 474-5655) to provide reasonable accommodation to student with disabilities.

Student Texts and Supplies:

NFES 002891	S-290 Student Workbook
NFES 002893	S-290 Student CD-ROM
NFES 002165	Fireline Handbook App B: Fire Behavior, PMS
410-2	

Suggested Readings:

Students should come to class prepared for discussion and note taking.

Course Calendar with Readings and Work Assignments:
(Subject to variation as the class progresses.)

Session 1

0800-0900 Unit 0 – Introduction
0900-1000 Unit 1 – The Fire Environment
1000-1100 Unit 2 – Topographic Influences on Wildland Fire Behavior
1100-1200 Unit 3 – Fuels
1200-1300 Lunch
1300-1400 Unit 3 – Fuels (continued)
1400-1530 Unit 4 – Basic Weather Processes
1530-1700 Unit 5 – Temperature and Humidity Relationships

Session 2

0800-1200 Unit 6 – Atmospheric Stability
1200-1300 Lunch
1300-1700 Unit 7 – Wind Systems

Session 3

0800-1000 Unit 8 – Keeping Current with the Weather
1000-1130 Unit 9 – Observing the Weather
1130-1230 Lunch
1230-1530 Unit 10 – Fuel Moisture
1530-1630 Unit 11 – Extreme Wildland Fire Behavior

Session 4

0800-0900 Unit 11 – Extreme Wildland Fire Behavior (continued)
0900-1200 Unit 12 – Gauging Fire Behavior and Guiding Fireline Decisions
1200-1300 Lunch
1300-1500 Unit 12 – Gauging Fire Behavior... (cont.)
1500-1700 Final Exam

Schedule for 32 hours (4 days)

Instructors:

Instructor #1 Name

Contact Information:

e-mail

Office

Home

Cell

Instructor #2 Name

Contact Information:

email:

Office

Home

Cell