



New Hampshire Department of Safety
Division of Fire Standards and Training and Emergency Medical Services
33 Hazen Drive, Concord, NH 03305 1-800-371-4503 or 603-223-4200 FAX: 603-271-1091

FIRE STANDARDS AND TRAINING COMMISSION

CURRICULUM DEVELOPMENT AND APPROVAL GUIDE

FIREFIGHTER I **NFPA 1001 2019**

Approved by the New Hampshire Fire Standards and Training Commission

Commission Approval

A handwritten signature in black ink, appearing to be 'E. H. Smith', written over a horizontal line.

Date:

9/17/23
Effect April 7, 2022

INTRODUCTION:

The New Hampshire Fire Standards and Training Commission is responsible for the approval of certification curricula for firefighters throughout the state. To accomplish this portion of their mission, the Commission establishes a Visiting Committee who is charged with recommending new curricula, or updating existing certification programs, to present to the Commission for approval and adoption.

SCOPE:

This procedure shall apply to all Visiting Committees appointed by the Fire Standards and Training Commission.

PROCEDURE:

- I. The establishment of the Visiting Committee shall follow the approved policy from the Commission.
- II. Once appointed, the Visiting Committee shall be charged with providing valuable input of the current needs facing the New Hampshire emergency services responders. They shall work closely with the Division to provide this input and feedback on the proposed curriculum.
- III. With input from the Visiting Committee, the Division shall be responsible for formulating module lesson plans, presentation outlines, and job performance requirements and be consistent with Fire Part 402.03. It is not the responsibility of the Visiting Committee to choose instructors or design quizzes and exams.
- IV. Once a curriculum package is selected and all necessary documentation is completed, the Committee shall present to the Curriculum Committee for approval. If the Curriculum Committee approved the proposal it shall then be brought forward to the full Commission for a preliminary approval. Once a preliminary approval has been granted, two public hearings (one in the day and one in the evening) shall be held in conjunction with a 60 day written comment period. All pertinent documentation shall be posted on the Division's website and notification of the comment period shall be distributed. Additionally, if ProBoard approval is required, it shall be done simultaneously with the public comment period.
- V. Upon completion of the public comment period and approval from ProBoard, if applicable, the final curriculum and public comments shall be brought forward to the full Commission for final approval.
- VI. Upon completion of two deliveries of the curriculum or after a period of one year, which ever happens first, the Division shall provide the Commission an evaluation of the curriculum and any suggested curriculum modifications needed.

MEETING GUIDELINES:

- I. All Visiting Committee meetings shall be posted in advance on the Division's website along with the other meetings of the Commission. Along with posting each meeting, notification shall be sent to any person that expressed interest in being a member of the committee who was not selected.
- II. A quorum on each Visiting Committee shall be established as a simple majority of the seated members. It is the intent to have an in-person quorum at each meeting, however in coordination with the Commission's representative the use of conferencing calling and/or video conferencing may be utilized.
- III. In the event a quorum is not possible, the Commission representative shall make the determination whether to hold the meeting or postpone it.
- IV. Upon the conclusion of each meeting, minutes shall be posted to the Division's website
- V. All final recommendations shall be voted on by a quorum of the Visiting Committee.

Curriculum Information Sheet

Name of Certification:
(including NFPA Standard)

Firefighter I

NFPA Standards #: 1001 Edition Date: 2019 Next Edition: 2023

Type of Certificate:

NH Certification: _____ Pro-Board Certified ☒ X
Certificate of Attendance: _____

**Curriculum Committee
Approval**

Curriculum Committee Approval

July 8, 2020

Date: _____

**ProBoard/Certification
requirements:**

*Please attach all job sheets
and NFPA matrix*

Number of exam questions: 100
Job Sheets updated and formatted: In Process
NFPA Matrix: In Process
Method of Delivery: Classroom / Hybrid / Online

Reference Material for Students:
Include edition numbers

Fire Engineering: Handbook for Firefighter I & II
First Aid

Class Size: Min: 12

Max: 24

Number of Hours: 165 in-person
202 Total

Module Breakdown:

Fire Service Orientation	Hours:	Appendix A
Fire History	Hours:	Appendix A
Health and Wellness	Hours:	Appendix A
First Aid	Hours:	Appendix A
Firefighter Safety	Hours:	Appendix A
Cancer Awareness	Hours:	Appendix A
PPE & SCBA	Hours:	Appendix A
Communications	Hours:	Appendix A
Fire Behavior	Hours:	Appendix A
Building Construction and Utilities	Hours:	Appendix A
Portable Extinguishers	Hours:	Appendix A
Tools and Equipment	Hours:	Appendix A
Ropes and Knots	Hours:	Appendix A
Forcible Entry	Hours:	Appendix A
Ladders	Hours:	Appendix A
Search and Rescue	Hours:	Appendix A
Ventilation	Hours:	Appendix A
Water Supply	Hours:	Appendix A
Fire Attack and Hose	Hours:	Appendix A
Firefighter Survival	Hours:	Appendix A
Salvage and Overhaul	Hours:	Appendix A
Firefighter Rehab	Hours:	Appendix A

Fire Suppression	Hours:	Appendix A
Hazmat Awareness	Hours:	Appendix A
Hazmat Operations with PPE and Product Control	Hours:	Appendix A
Forestry	Hours:	Appendix A
Traffic Incident Management	Hours:	Appendix A
Air Monitoring	Hours:	Appendix A
	Hours:	
	Hours:	

Prerequisites:

Valid Medical Release
ICS100, ICS 200, ICS700
Professional Rescue CPR or equivalent expiring after the end of the training program

Requirements for Testing:

Valid Medical Release
Successful completion of all training requirement
Valid Professional Rescue CPR Certification
ICS100, ICS 200, ICS700
Certified in Hazardous Materials Awareness
Certified in Hazardous Materials Operations with PPE and Product Control
Valid First Aid Certification

What type of factor determines successful completion:

Attach sample schedule of proposed training program:

Yes _____ No _____

Attach roster appointed Visiting Committee members

Yes _____ No _____

Preliminary Commission Approval

Commission Meeting approval

9/3/2020

Date:

Public Hearing Dates

Daytime: 9/30/20 & 10/14/20 Evening: 9/30/20 & 10/14/20

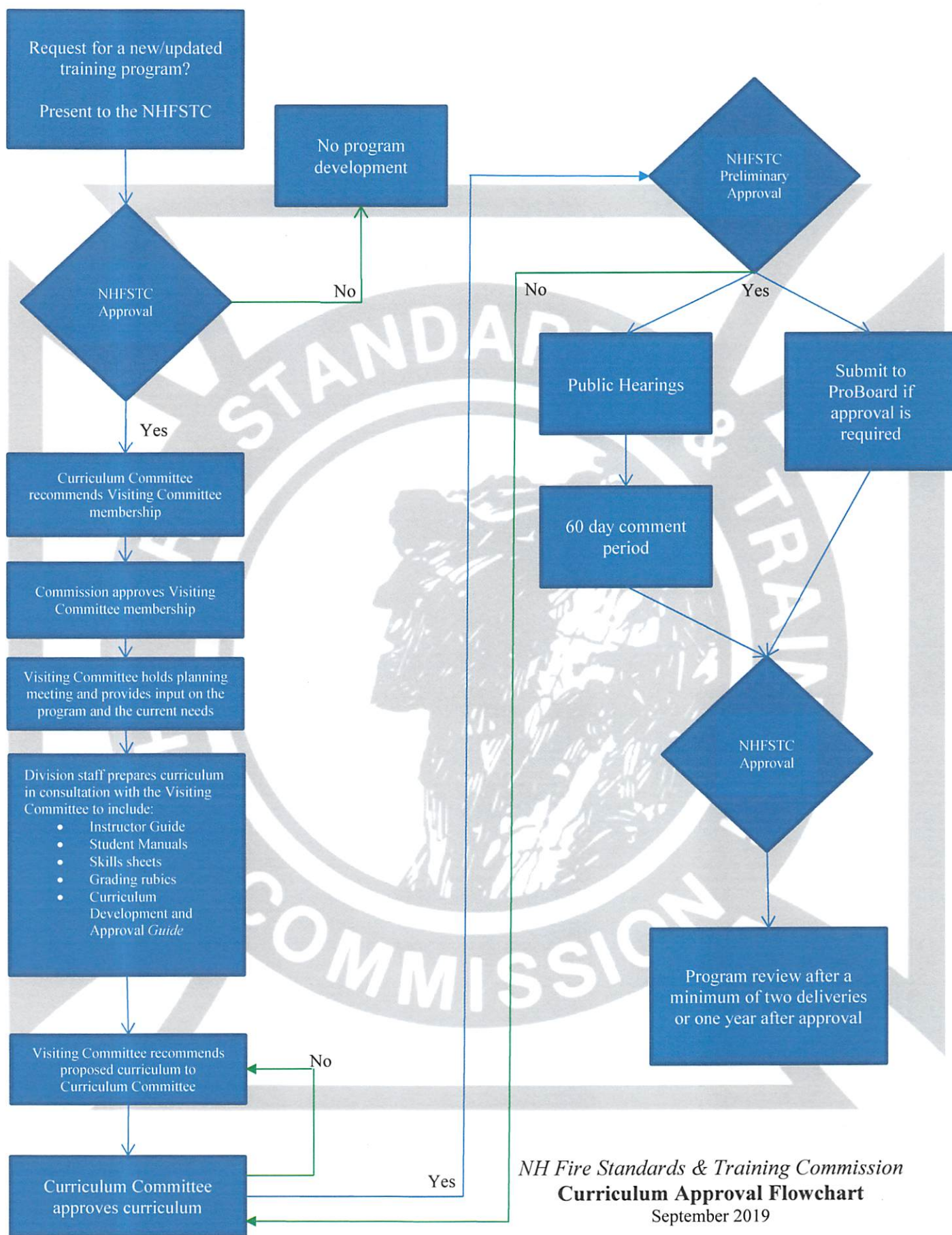
60 day comment period window

9/3/2020 to 11/3/2020

Please attach all public comment material to this document

Please attach the following:

- ProBoard Test matrix
- Test stations
- Practical exam testing explanation
- Sample schedule
- Visiting Committee members roster



	Old Curriculum			New Curriculum			
	Lecture	Practical	Online	Lecture	Lab	Practical	Online
Orientation	0	0	1	0	0	0	1
History	0	0	2	0	0	0	2
Wellness	4	4	0	0	0	8	3
First Aid (CPR moved to Prerq)	0	8	2	0	0	2	1.5
Safety	2	0	1	0	0	0	1
Cancer Awareness	0	0	1	0	0	0	1
PPE / SCBA	4	8	1	0	2	6	1.5
Communications	0	4	1.5	0	0	2	2
Fire Behavior	2	8	1	0	0	4	1
Building Construction & Utilities	2	4	1	0	0	4	2.5
Portable Extinguishers	2	2	0	0	0	4	1
Tools	0	4	0	0	0	4	1
Ropes	2	8	0	0	0	8	1
Response & Size Up	2	0	0	0	0	0	0
Forcible entry	2	4	0	0	0	4	1
Ladders	4	16	0	0	0	16	2
S&R	2	8	0	0	0	8	1
Ventilation	2	4	0	0	0	4	1
Water Supply	2	4	0	0	0	4	1
Fire Attack hose	4	20	0	0	4	28	1
Survival	2	8	0	0	0	8	1
S&OH	2	4	0	0	0	4	1
Rehab	2	0	0	0	0	0	1
Suppression	2	16	0	0	0	16	1
Cause	2	0	1	0	0	0	0
HMA	0	0	1	0	0	0	1
HMO	8	8	0	8	0	8	0
WFFI / Forestry	3	8	25	0	0	9	3
T.I.M.S.	0	0	0	0	0	0	1.5
Air Mon	0	0	0	0	0	0	1
Utilities	0	1	0	0	0	0	0
Totals	57	151	38.5	8	6	151	37
	Total Curriculum			Total Curriculum			
	208			165			
	247			202			

	Old Curriculum			Combined Curriculum			
	Lecture	Practical	Online	Lecture	Lab	Practical	Online
CTBS	0	0		0	0	0	1
Orientation	0	0	0	0	0	0	0
Foam & Flammable Liquids	4	8	0	0	0	8	2
FFII FFI skills review	0	12	N/A	0	0	0	N/A
Assist Rescue Teams	0	0	N/A	0	4	0	1
Communication II	0	0	N/A	0	0	0	1.5
Preplan / inspection	2	0	0	0	0	0	2
Public Education	2	0	0	0	0	2	1
Fire Cause and Determination	4	0	0	0	0	2	1
Fire Detection Suppression	4	0	0	0	0	0	2
ICS	0	8	0	0	0	0	N/A
Lifting and Jacking	4	8	0	0	0	0	N/A
Air monitoring	2	2	0	0	0	0	N/A
Rope and Rigging	4	16	0	0	0	0	N/A
Auto Extrication	4	8	0	0	4	8	2
Advanced Hose	0	0	N/A	0	0	0	1
Fire Suppression	4	8	0	0	0	8	2
FFI Safety Skills	4	4	0	0	0	0	N/A
Flashover	4	8	0	0	0	0	N/A
Totals	42	82	0	0	8	28	17
	Total In Person Hours			Total In Person Hours			
	124			36			
	Total Curriculum			Total Curriculum			
	124			53			

	Standalone Curriculum			
	Lecture	Lab	Practical	Online
0	0	0	0	1
0	0	0	0	0
0	0	0	8	2
0	0	16	N/A	
0	4	0	1	
0	0	0	1.5	
0	0	0	2	
0	0	2	1	
0	0	2	1	
0	0	0	2	
0	0	0	N/A	
0	0	0	N/A	
0	0	0	N/A	
0	0	0	N/A	
0	4	8	2	
0	0	0	1	
0	0	16	2	
0	0	0	N/A	
0	0	0	N/A	
Totals	0	8	52	17
	Total In Person Hours			
	60			
	Total Curriculum			
	77			

	Old	New	% Change
Firefighter I In-person hours	208	165	-21%
Firefighter I Total Hours	247	202	-18%
Firefighter II In-person hours	124	36	-71%
Firefighter II Total Hours	124	53	-58%
Firefighter I & II In-person hours	332	201	-39%
Firefighter I & II Total Hours	371	255	-31%

Orientation
History
Wellness
- Stress in Emergency Services
First Aid (CPR moved to Prerq)
Safety
Cancer Awareness
PPE / SCBA
Communications
Fire Behavior
Building Construction & Utilities
Portable Extinguishers
Tools
Ropes
Response & Size Up
Forcible entry
Ladders
S&R
Ventilation
Water Supply
Fire Attack hose
Survival
S&OH
Rehab
Suppression
Cause
HMA
HMO
WFFI / Forestry
T.I.M.S.
Air Mon
Utilities
Totals

Approved Curriculum

Lecture	Lab	Practical	Online
0	0	0	1
0	0	0	2
0	0	8	3
0	0	0	0
0	0	2	1.5
0	0	0	1
0	0	0	1
0	2	6	1.5
0	0	2	2
0	0	4	1
0	0	4	2.5
0	0	4	1
0	0	4	1
0	0	8	1
0	0	0	0
0	0	4	1
0	0	16	2
0	0	8	1
0	0	4	1
0	0	4	1
0	4	28	1
0	0	8	1
0	0	4	1
0	0	0	1
0	0	16	1
0	0	0	0
0	0	0	1
8	0	8	0
0	0	9	3
0	0	0	1.5
0	0	0	1
0	0	0	0
8	6	151	37

Total Curriculum 165 202

Recommended

Lecture	Lab	Practical	Online
0	0	0	1
0	0	0	2
0	0	8	1.25
0	0	0	1
0	0	2	2
0	0	0	0.75
0	0	0	1
0	2	6	2
0	0	4	1
0	0	4	1
0	0	4	1
0	0	4	1
0	0	4	0.75
0	0	8	1
0	0	0	0
0	0	8	1
0	0	16	2
0	0	8	1
0	0	8	1
0	0	4	0.5
0	4	32	1
0	0	8	1.25
0	0	4	1
0	0	0	1
0	0	16	1
0	0	0	0
0	0	0	3
8	0	8	0
0	0	9	1
0	0	0	1.5
0	0	0	1
0	0	0	0
8	6	165	34

Total Curriculum 179 213

Combined Curriculum

CTBS
Orientation
Foam & Flammable Liquids
FFII FFI skills review
Assist Rescue Teams
Commication II
Preplan / inspection
Public Education
Fire Cause and Determination
Fire Detection Suppression
ICS
Lifting and Jacking
Air monitoring
Rope and Rigging
Auto Extrication
Advanced Hose
Fire Suppression
FFI Safety Skills
Flashover
Totals

Lecture	Lab	Practical	Online
0	0	0	1
0	0	0	0
0	0	8	2
0	0	0	N/A
0	4	0	1
0	0	0	1.5
0	0	0	2
0	0	2	1
0	0	2	1
0	0	0	2
0	0	0	N/A
0	0	0	N/A
0	0	0	N/A
0	0	0	N/A
0	4	8	2
0	0	0	1
0	0	8	2
0	0	0	N/A
0	0	0	N/A
0	8	28	17

Total In Person Hours 36
Total Curriculum 53

Standalone Curriculum

Lecture	Lab	Practical	Online
0	0	0	1
0	0	0	0
0	0	8	2
0	0	16	N/A
0	4	0	1
0	0	0	1.5
0	0	0	2
0	0	2	1
0	0	2	1
0	0	0	2
0	0	0	N/A
0	0	0	N/A
0	0	0	N/A
0	0	0	N/A
0	4	8	2
0	0	0	1
0	0	16	2
0	0	0	N/A
0	0	0	N/A
0	8	52	17

Total In Person Hours 60
Total Curriculum 77

**DIVISION OF
FIRE STANDARDS AND TRAINING AND
EMERGENCY MEDICAL SERVICES**

**CURRICULUM REVIEW AND ANALYSIS
REPORT**

**FIREFIGHTER I & II
NFPA 1001 2019**

JANUARY 2022

EXECUTIVE SUMMARY

The current FFI and FFII curriculum, NFPA 1001, 2019 Edition, was approved for delivery by the New Hampshire Fire Standards & Training Commission in November of 2019. The COVID19 outbreak delayed the completion of delivery of all programs that began in January of 2020, with classes not starting up again until July of that year.

As part of the review process for these programs, the Division formed the NFPA 1001 Working Group in November of 2021. This group was tasked with responding to concerns raised by some of our staff and constituents regarding the Fire Engineering FFI and FFII curriculum and the delivery of same.

Several Uniformed Staff and Instructors were invited to provide their opinions on the delivery of the new curriculum; their observations and suggestions make up the bulk of this report.

The Division prides itself on delivering the best possible instruction to our students. We have discovered some areas of weakness and have recommendations to move forward with corrections that will benefit all involved.

The following information is based on the deliveries of the following programs:

Firefighter I	Firefighter II
Bartlett	Brookline
Recruit School	Recruit School
Lake Region Community College	Lake Region Community College
Sunapee	Bethlehem
Tuftonboro	Newington
Newington	Sunapee

EXAM

Analysis: **Written Examination**

The average written score when comparing Jones & Bartlett versus Fire Engineering Curriculum has not changed remarkably. We did discover some difficulties for the students with the FFII exam but those were traced back to Instructor related issues and not the exam itself.

FFI Jones & Bartlett: 73.39

FFI Fire Engineering: 82.13

FFII Jones & Bartlett: 74.63

FFII Fire Engineering: 75.08

The above data covers the entire delivery of the previous Jones and Bartlett delivery (approximately 4- 5 years) while the data covers only one year of delivery of the Fire Engineering.

Practical Examination

Students had a 100% eventual pass rate for both the Firefighter I and Firefighter II practical exams.

The Firefighter I practical skill station requiring the most number of re-takes is the B position on the Suppression (Above Grade) scenario. This station requires students to successfully manage three pinch points to provide enough hose for the A position to make the room and then to advance into the room. The next station requiring additional re-takes is the A position on the Rescue scenario. This requires the candidate to successfully place and manipulate the tool, halligan, to force the door. Only two times has the candidate been required to utilize the third attempt Monthly Testing option to pass the exam. This seems remarkable given the increase in total number of skills evaluated and the complexity of the scenario stations.

The Firefighter II practical position needing the most re-takes is the B position on the VEIS, Advanced Fire scenario. This is typically because the B candidate does not go on air as they rise to the level of the window and enters the IDLH environment. Only one student has been required to use their third attempt, Monthly Testing option to complete the practical. Firefighter II now incorporates Project based assignments within the OLA classroom. These Projects are for the NFIRS reports, Pre-Incident Inspection and Fire Cause topics.

As the practical examination begins to increase the randomness in the Practical Skills assessments for both the Firefighter I and Firefighter II testing days a certain amount of increased anxiety among the students and the instructors should be expected. This will initially require the Captains and course coordinators to do a more thorough job in managing the expectations of the instructors at the beginning of the program. If we can accomplish this task there should be minimal disruption to the students.

Recommendations: One challenge we have encountered with the new method of testing is inclement and/or cold weather. Typically due to safety reasons practical evolutions that require flowing large amounts of water are not scheduled during cold temperatures. The testing stations now require flowing large amounts of water and we are currently examining different methods to reduce the amount of water and different schedule techniques to conduct the practical testing before colder weather.

REFERENCE MATERIALS

- Analysis:* The textbook was reviewed by several members of our Uniformed Staff and Instructors. All felt that the information contained was an improvement from the Jones & Bartlett textbook that had been used for the previous Standard update. However, input we have received from our students have indicated that there are numerous pages of incorrect or incomplete information and grammatical errors.
- Recommendations:* Shifting to a different textbook at this point may prove to be difficult and costly. We should have our NFPA 1001 Working Group review the textbook and provide guidance to our Instructional Staff to overcome any deficiencies that we discover. The Working Group should also begin looking at textbooks from other Publishers now to better prepare us for the next Standard change. Recently Certified Students should be solicited to assist us in this endeavor, as they are looking at the material from a different perspective.

CLASS SIZE

- Analysis:* Class size is set at 24 students, but we have overbooked to up to 30 students. This is an issue because it adds time to practical evolutions working this large number of students through the skills. Many times our students only get one attempt at completing a skill which detracts from their gaining proficiency. Drop-out rates vary from class to class and reasons range from lack of Academic performance to an inability to complete psychomotor skills due to poor physical conditioning. There are other occasions where personal reasons well beyond the scope of the program affect a student's decision to withdraw.
- Recommendations:* The recommendation is to keep the class size at a maximum of 24 students. We must continue the counseling of students early in the program regarding the need for focused Academic achievement. Good physical conditioning should be encouraged before a student considers enrolling in the program.

MODULE BREAKDOWN

- Module:* Ventilation
- Current Overview:* 4 Hours
- Recommendation:* Increase to 8 Hours
- Rationale for Recommendation:* In four hours students can complete pitched roof, flat roof, and positive and negative ventilation. However, they cannot perform the skills of venting the floor, windows, doors and Vent/Enter/Isolate/Search in four hours. Eight hours would be sufficient, unless you factor in make-up students arriving for practical days and the events when classes are over booked.
- Module:* Communications

Current Overview: 2 Hours

Recommendation: Increase to 4 Hours

Rationale for Recommendation: In two hours we cannot complete the four required skills with a class of 24 students. Skills would need to be removed to hold to the currently approved hours. One skill that is outline in the standards is the ability for the individual to properly receive a phone call and take the appropriate information from the caller. Due to the number of students in the course this take a considerable amount of time to complete. Additionally, the Educational Technology groups is working on completing the online development of tour of E911 and dispatch center

Module: Forcible Entry

Current Overview: 4 Hours

Recommendation: Increase to 8 Hours

Rationale for Recommendation: Two skills that were omitted from the overview sheet were the sizing up padlocks and different techniques to break padlocks. With the addition of these skills and to ensure students are more proficient with the other forcible entry skills the additional 4 hours for this program is needed.

Module: Hose

Current Overview: 28 Hours

Recommendation: Increase to 32 Hours

Rationale for Recommendation: Even with the reduction of hose loads it was found the student still continue to struggle with proficiently packing and unpacking hose. With the addition of 4 hours to the hose course it will allow each student additional time to become more proficient.

Module: Fire Behavior/Flashover

Current Overview: 4 Hours

Recommendation: Keep program as delivered.

Rationale for Recommendation: At this time, this program is only able to be delivered at the Concord Campus which would require all students to travel to Concord to complete the objectives of this course.

PRACTICAL JOB SHEETS

Analysis: The current practical job sheets cover all aspects of the NFPA 1001 Standard.

Recommendations: There is no reason to alter the job sheets unless it is decided to remove skills.

DELIVERY METHODS

- Analysis:* Much of the current online programs were developed using the Jones & Bartlett curriculum. Additionally, students need Lab time with instructors in between the online portion and the expectation of performing practical skills.
- Recommendations:* Our instructional staff needs to be trained to deliver this bridge formula of learning between the online presentation and the performance of skills.

PREREQUISITES

- Analysis:* A disconnect remains between what the prerequisites are and what the students and departments believe them to be. Having a Medical Release Form submitted complete and in a timely manner is a frequent problem, as is the CPR certification.
- Recommendations:* Provide more communication to all students, departments and fire chiefs on what the prerequisites for the program are. Additionally, with the implementation of the new course schedule process for Division operated programs, it will give students more lead time between announcing and seating a program should be considered. Conflicting information has been removed from the Division's website and the Course Catalog list the correct prerequisites.

REQUIREMENTS FOR TESTING

- Analysis:* Completion of all Commission approved modules in the 1001 Standard, Hazardous Materials Awareness/Operations certification, and current, valid CPR certification at time of testing.
- Recommendations:* No recommendations for change.

SCHEDULE

- Analysis:* The schedule of delivery continues to work well for the delivery of the program with a couple classes that do not have sufficient time to complete all the skills.
- Recommendations:* Adopt the changes to the number of hours for each of the course outlined in the recommendations.

SYLLABUS

- Analysis:* Input that we have received concerning what we use as a syllabus indicates that it is not adequate.
- Recommendations:* A syllabus for our program needs to be developed to provide a comprehensive outline of the requirements and due dates of the program.

INSTRUCTORS

- Analysis:* The Fire Engineering textbook has enough different terminology than previous curriculums to be problematical. Some Instructors have been relying on what they know from past curriculums and years of on the job experience to communicate information to the Students. This has created confusion and led to incorrect answers being selected on the written exams.
- Recommendations:* The need for Instructor development must be established as soon as possible. We must have an ongoing dialogue with our Staff to keep them updated with current trends and terminologies to provide them with a better opportunity to be successful. Online, classroom, and hands on training for new and existing Instructors must be a priority. The Division has developed a video library called Skills University in which both students and instructors can review the proper method of performing skills.

Additionally, the Division has purchased e-books of the Fire Engineering curriculum for all the instructional staff while teaching in the Firefighter I and II program.

STUDENT EVALUATIONS

- Analysis:* The Division reviewed both the in class student evaluations as well as conducting a more recent survey of those who attended Firefighter I and II since the change in the curriculum.

Overall 1,352 student surveys were evaluated over the course of the past year related to Firefighter I and/or II. After reviewing the in class surveys the overall feedback of the program trends to be extremely favorable. Students rated the course 4.7/5 on both how they felt the course met their expectations and their overall experience for the course.

The most recent survey the Division sent direct to all students who took the Firefighter I and/or II program resulted in 52 responses out of approximately 250 requests. Overall, the results were positive and highlighted many of the same issues outlined in this document such as areas like:

- Having a more clear concise syllabus
- Continued focus on more practical time
- Instructor inconsistencies
- Spelling and other errors contained in the Fire Engineering text

PLAN FOR IMPLEMENTING RECOMMENDATIONS

RECOMMENDATION #1

Recommendation 1	Establish a well-developed syllabus that outlines all the student requirements.	
Timeframe:	March 15, 2022	Assigned to: Chief Arnold Anderson
Critical Tasks:	1. Establish a standard syllabus for both Firefighter I and II	

RECOMMENDATION #2

Recommendation 2	Increase the number of hours for the Ventilation course from 4 to 8 hours.	
Timeframe:	ASAP	Assigned to: Chief Arnold Anderson
Critical Tasks:	1. Update schedule to reflect changes	

RECOMMENDATION #3

Recommendation 3	Increase the number of hours for the Communications course from 2 to 4 hours.	
Timeframe:	ASAP	Assigned to: Chief Arnold Anderson
Critical Tasks:	1. Update schedule to reflect changes	

RECOMMENDATION #4

Recommendation 4	Increase the number of hours for the Forcible Entry course from 4 to 8 hours.	
Timeframe:	ASAP	Assigned to: Chief Arnold Anderson
Critical Tasks:	1. Update schedule to reflect changes	

RECOMMENDATION #5

Recommendation 5	Increase the number of hours for the Hose practical course from 28 to 32 hours.	
Timeframe:	ASAP	Assigned to: Chief Arnold Anderson
Critical Tasks:	1. Update schedule to reflect changes	

RECOMMENDATION #6

Recommendation 6	Provide access to the text book to current instructors.	
Timeframe:	Ongoing	Assigned to: Chief Arnold Anderson
Critical Tasks:	<ol style="list-style-type: none"> 1. Purchase electronic copies of the book 2. Distribute and track the publications 	

RECOMMENDATION #7

Recommendation 7	Provide written communication to students, departments and chiefs about the prerequisites requirements for Firefighter I and II	
Timeframe:	April 1, 2022	Assigned to: Chief Arnold Anderson
Critical Tasks:	<ol style="list-style-type: none"> 1. Draft and send announcement about prerequisites 	

RECOMMENDATION #8

Recommendation 8	Develop an extensive instructor development program direct at the delivery of Firefighter I and II	
Timeframe:	June 1, 2022	Assigned to: Captain Gregory Brown
Critical Tasks:	<ol style="list-style-type: none"> 1. Form a group to outline the process 2. Develop and schedule the delivery schedule 3. Track the instructors who attend the program 4. Monitor student evaluations 	

**REPORT OF THE CURRICULUM COMMITTEE CONCERNING THE DELIVERY OF FIREFIGHTER 1
BASED ON THE CURRICULUM APPROVED NOVEMBER 2020**

At the most recent meeting of the Curriculum Committee, which was held on March 10, 2022 and attended by Commissioner Fraitzl, Commissioner Wilking and Commissioner Clark there was significant discussion centered during the 3 hour meeting on how the Firefighter I ("FF1") program delivered in the traditional 2 nights a week and a day every other weekend could be improved.

Overall, the Committee Members recognized that the changes in the Curriculum that was approved at the November 2020 Commission meeting has had positive results with higher pass rates and test scores than previously. There was concern that there are issues including the lack of on-line videos that complement the textbook, on-line classes that are not consistent with the textbook, skill sheets that not consistent with the textbook and instructors not fully aware of the changes in the curriculum and terminology used in the textbook. It was agreed that these were management issues and were assured that they are being addressed.

It was also discussed that there are Chiefs in the State that are not aware of the specifics of a Firefighter 1 program as they either never took the course or took the course many years ago with different requirements and delivery. It was agreed that it should be a high priority of the Division to prepare a "brochure" that explained the course, the prerequisites, the expectations of a student including computer skills and the time commitment. The brochure would also explain that the Academy's goal is to create students that display competency in knowledge and skills specific to the Job Performance Requirements (JPR) detailed in the NFPA standard 1001.

The Committee approved recommending the changes in the curriculum proposed by the Division which primarily consisted of adjusting hours to better reflect the time needed to have competent firefighters per module. The Committee did determine that a position paper would be prepared by the Committee to further explain to the full Commission the concerns that the Committee discussed for the delivery of Firefighter 1 which is the most important class offered by the Division.

The result is this document.

Prerequisites

Firefighter 1 currently has four prerequisites: Medical Release, ICS 100, ICS 200 and CPR. At question was if these prerequisites were true prerequisites required prior to the start of course or required to be completed prior to completion of the course. There was no question that the Medical Release was needed prior to the start of the course. It was agreed that the knowledge learned from ICS 100 and ICS 200 was not necessarily needed as a true prerequisite, but it was agreed that due to the student workload and administrative efficiency that the student should complete these two on-line courses prior to starting the FF1 course.

Last, the Committee noted that there was no first aid or medical knowledge or skill requirement in the FF1 standards, but all believed that it was important as medical calls for most Fire Departments are a large percentage of emergency calls. The Committee agreed that it would be best if certification in CPR was obtained prior to starting the course again primarily due to the time commitment of the student once the course commences. The Committee advised the Division that these prerequisites need to be better explained to the Chiefs and Department Training Officers well in advance of a course. It was agreed that the "Brochure" would be an effective method of communicating those requirements. It was further discussed that the Course Coordinator should have some reasonable flexibility with individual students in the timing of the requirements except for the Medical Release.

Competency vs. Proficiency

The Committee discussed with Division Staff the expectations of a student that graduates the course and that of the Chiefs. According to the NFPA 1001 standard, a firefighter certified at the FF1 level is the minimum requirement to be on a fireground and then only with direct supervision. The objective of the Division is to have graduates of a course to have displayed competency in the Job Performance Requirements in both knowledge (70% grade or above) and skills with no failure of a critical skill.

The Harvard Macy Institute addresses the issue as follows:

Teaching procedural skills to novice providers can be challenging. Maintaining procedural skill and advancing from competent to proficient can be even more difficult. Simple practice and the 'See One, Do One, Teach One' model may not be sufficient. Competency represents the minimal threshold for skill development while proficiency signifies an element of mastery. For simplicity, these two concepts may represent the floor (competency) and the ceiling (proficiency) for many providers as they acquire and maintain procedural skills.

It should be the expectation of students and Chiefs that after successfully completing FF 1 class that they should be competent to safely be working on a fireground under direct supervision. To become proficient, they require time and experience to master skills. It also needs to be recognized that the FF1 skills are perishable. It is the responsibility of the individual Departments to continually drill and practice the skills taught in FF1. This is especially true with the reduced number of fires that most departments face.

The difference between Proficiency and Competency should be explained to the Chiefs and Students in the Brochure discussed earlier and as part of the initial introduction to the course.

Course Maximum Students

The Committee discussed with Staff the minimum and maximum students that should be enrolled in a FF1 course. It was quickly recognized that there was a difference between the Commission established minimum and maximums and that of the Division. It is not fully understood why the differences, but if there are two set of standards the Division's minimum and maximum should be within the parameter's set by the Commission.

The Commission minimum number of students is 12 and the maximum is 24. There are two current FF1 classes one which has 18 students and the other has 30. This is a significant difference. The justification for the large class is typically there are a significant number of students that drop out of the class. The dropout rate can be reduced significantly through educating the students and Chiefs of what to expect from the class. This is expected to be accomplished through the "Brochure" previously discussed, but the Division might consider holding a true informational session well before the start of a FF1 course to educate students prior to their commitment.

The size of the class use to be a financial consideration, but is currently not a consideration as funds have been allocated by the legislators to fund FF 1 classes. This funding is expected to continue. There was discussion among the Committee that 18 appeared to be the ideal class size, but no definitive recommendation other than 30 is far too many. The size of the class has a direct bearing on the number of instructors that are needed (which are in short supply) and the hours required to obtain competency with the various skills. It was a recommendation of the Committee that the size of the classes be a discussion of the full Commission.

Course Hours

At the Committee Meeting the Division Staff requested permission to adjust published hours for certain modules. This included both reductions and additions in hours from what was recommended when the Commission initially approved the Course Curriculum. The Committee concluded that the hours are just advisory and should not be considered as time that must be spent on a module.

The FF 1 course requirement is to demonstrate competency to the requirements of NFPA 1001 and not hours spent in the course. The hours required to be expended will differ from each class. Large classes will require more hours than small classes. The students will also have a direct impact on the hours needed to have the students reach competency. If the students bring with them life skills that are part of FF 1 or experience from their department, the hours required will be substantially different than a class that is predominantly new to the fire service and lack life skills that are transferable to the course.

The Committee recommended that the Course Coordinator/Lead instructor have the ability to dismiss the class early or practice perishable skills such as knots or SCBA evolutions. Conversely if more time be required for a particular class that time be found in the schedule. The Committee strongly advised that a class should not be expanded to fill the hours allocated,

Summary

The Committee was pleased with the results of the revised Firefighter 1 curriculum. There was some frustration that it has taken so long to have a comprehensive syllabus and the inconsistencies between textbook, skill sheets, on-line course segments and instructors. It is recognized that Division staffing is an issue, but since Firefighter 1 is the most important course offered by the Division, that the Director consider reassigning the limited available staff to resolve the numerous current inconsistencies with the Firefighter 1 course, develop a brochure and expedite the development of a detailed course syllabus.



New Hampshire Department of Safety
Division of Fire Standards and Training and Emergency Medical Services
33 Hazen Drive, Concord, NH 03305 1-800-371-4503 or 603-223-4200 FAX: 603-271-1091

FIRE STANDARDS AND TRAINING COMMISSION

CURRICULUM DEVELOPMENT AND APPROVAL GUIDE

FIREFIGHTER I **NFPA 1001 2019**

Approved by the New Hampshire Fire Standards and Training Commission

Commission Approval

A blue ink signature, likely of J. Thibault, is written over a horizontal line.

Date:

11/5/2020

INTRODUCTION:

The New Hampshire Fire Standards and Training Commission is responsible for the approval of certification curricula for firefighters throughout the state. To accomplish this portion of their mission, the Commission establishes a Visiting Committee who is charged with recommending new curricula, or updating existing certification programs, to present to the Commission for approval and adoption.

SCOPE:

This procedure shall apply to all Visiting Committees appointed by the Fire Standards and Training Commission.

PROCEDURE:

- I. The establishment of the Visiting Committee shall follow the approved policy from the Commission.
- II. Once appointed, the Visiting Committee shall be charged with providing valuable input of the current needs facing the New Hampshire emergency services responders. They shall work closely with the Division to provide this input and feedback on the proposed curriculum.
- III. With input from the Visiting Committee, the Division shall be responsible for formulating module lesson plans, presentation outlines, and job performance requirements and be consistent with Fire Part 402.03. It is not the responsibility of the Visiting Committee to choose instructors or design quizzes and exams.
- IV. Once a curriculum package is selected and all necessary documentation is completed, the Committee shall present to the Curriculum Committee for approval. If the Curriculum Committee approved the proposal it shall then be brought forward to the full Commission for a preliminary approval. Once a preliminary approval has been granted, two public hearings (one in the day and one in the evening) shall be held in conjunction with a 60 day written comment period. All pertinent documentation shall be posted on the Division's website and notification of the comment period shall be distributed. Additionally, if ProBoard approval is required, it shall be done simultaneously with the public comment period.
- V. Upon completion of the public comment period and approval from ProBoard, if applicable, the final curriculum and public comments shall be brought forward to the full Commission for final approval.
- VI. Upon completion of two deliveries of the curriculum or after a period of one year, which ever happens first, the Division shall provide the Commission an evaluation of the curriculum and any suggested curriculum modifications needed.

MEETING GUIDELINES:

- I. All Visiting Committee meetings shall be posted in advance on the Division's website along with the other meetings of the Commission. Along with posting each meeting, notification shall be sent to any person that expressed interest in being a member of the committee who was not selected.
- II. A quorum on each Visiting Committee shall be established as a simple majority of the seated members. It is the intent to have an in-person quorum at each meeting, however in coordination with the Commission's representative the use of conferencing calling and/or video conferencing may be utilized.
- III. In the event a quorum is not possible, the Commission representative shall make the determination whether to hold the meeting or postpone it.
- IV. Upon the conclusion of each meeting, minutes shall be posted to the Division's website
- V. All final recommendations shall be voted on by a quorum of the Visiting Committee.

Curriculum Information Sheet

Name of Certification:
(including NFPA Standard)

Firefighter I

NFPA Standards #: 1001

Edition Date: 2019

Next Edition: 2023

Type of Certificate:

NH Certification: _____

Pro-Board Certified ☒

Certificate of Attendance: _____

**Curriculum Committee
Approval**

Curriculum Committee Approval

July 8, 2020

Date: _____

**ProBoard/Certification
requirements:**

*Please attach all job sheets
and NFPA matrix*

Number of exam questions: 100

Job Sheets updated and formatted: In Process

NFPA Matrix: In Process

Method of Delivery: Classroom / Hybrid / Online

Reference Material for Students:
Include edition numbers

Fire Engineering: Handbook for Firefighter I & II

First Aid

Class Size:

Min:

12

Max:

24

Number of Hours:

165 in-person

202 Total

Module Breakdown:

Fire Service Orientation

Hours: Appendix A

Fire History

Hours: Appendix A

Health and Wellness

Hours: Appendix A

First Aid

Hours: Appendix A

Firefighter Safety

Hours: Appendix A

Cancer Awareness

Hours: Appendix A

PPE & SCBA

Hours: Appendix A

Communications

Hours: Appendix A

Fire Behavior

Hours: Appendix A

Building Construction and Utilities

Hours: Appendix A

Portable Extinguishers

Hours: Appendix A

Tools and Equipment

Hours: Appendix A

Ropes and Knots

Hours: Appendix A

Forcible Entry

Hours: Appendix A

Ladders

Hours: Appendix A

Search and Rescue

Hours: Appendix A

Ventilation

Hours: Appendix A

Water Supply

Hours: Appendix A

Fire Attack and Hose

Hours: Appendix A

Firefighter Survival

Hours: Appendix A

Salvage and Overhaul

Hours: Appendix A

Firefighter Rehab

Hours: Appendix A

Fire Suppression	Hours:	Appendix A
Hazmat Awareness	Hours:	Appendix A
Hazmat Operations with PPE and Product Control	Hours:	Appendix A
Forestry	Hours:	Appendix A
Traffic Incident Management	Hours:	Appendix A
Air Monitoring	Hours:	Appendix A
	Hours:	
	Hours:	

Prerequisites:

Valid Medical Release
ICS100, ICS 200, ICS700
Professional Rescue CPR or equivalent expiring after the end of the training program

Requirements for Testing:

Valid Medical Release
Successful completion of all training requirement
Valid Professional Rescue CPR Certification
ICS100, ICS 200, ICS700
Certified in Hazardous Materials Awareness
Certified in Hazardous Materials Operations with PPE and Product Control
Valid First Aid Certification

What type of factor determines successful completion:

Attach sample schedule of proposed training program:

Yes _____ No _____

Attach roster appointed Visiting Committee members

Yes _____ No _____

Preliminary Commission Approval

Commission Meeting approval

9/3/2020

Date:

Public Hearing Dates

Daytime: 9/30/20 & 10/14/20 Evening: 9/30/20 & 10/14/20

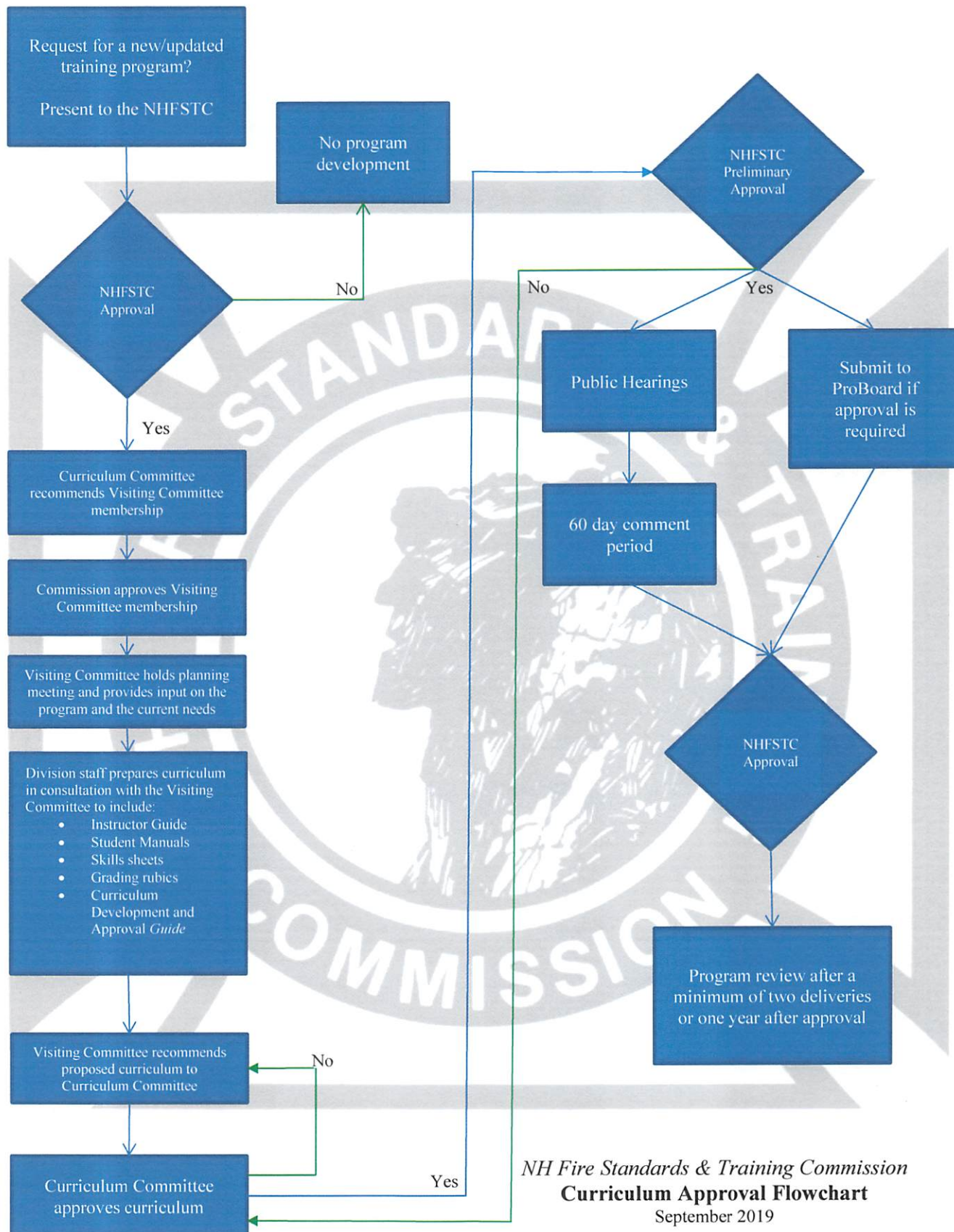
60 day comment period window

9/3/2020 to 11/3/2020

Please attach all public comment material to this document

Please attach the following:

- ProBoard Test matrix
- Test stations
- Practical exam testing explanation
- Sample schedule
- Visiting Committee members roster



NH Fire Standards & Training Commission
Curriculum Approval Flowchart
September 2019

Old Curriculum				New Curriculum			
	Lecture	Practical	Online	Lecture	Lab	Practical	Online
Orientation	0	0	1	0	0	0	1
History	0	0	2	0	0	0	2
Wellness	4	4	0	0	0	8	3
First Aid (CPR moved to Prereq)	0	8	2	0	0	2	1.5
Safety	2	0	1	0	0	0	1
Cancer Awareness	0	0	1	0	0	0	1
PPE / SCBA	4	8	1	0	2	6	1.5
Communications	0	4	1.5	0	0	2	2
Fire Behavior	2	8	1	0	0	4	1
Building Construction & Utilities	2	4	1	0	0	4	2.5
Portable Extinguishers	2	2	0	0	0	4	1
Tools	0	4	0	0	0	4	1
Ropes	2	8	0	0	0	8	1
Response & Size Up	2	0	0	0	0	0	0
Forcible entry	2	4	0	0	0	4	1
Ladders	4	16	0	0	0	16	2
S&R	2	8	0	0	0	8	1
Ventilation	2	4	0	0	0	4	1
Water Supply	2	4	0	0	0	4	1
Fire Attack hose	4	20	0	0	4	28	1
Survival	2	8	0	0	0	8	1
S&OH	2	4	0	0	0	4	1
Rehab	2	0	0	0	0	0	1
Suppression	2	16	0	0	0	16	1
Cause	2	0	1	0	0	0	0
HMA	0	0	1	0	0	0	1
HMO	8	8	0	8	0	8	0
WFFI / Forestry	3	8	25	0	0	9	3
T.I.M.S.	0	0	0	0	0	0	1.5
Air Mon	0	0	0	0	0	0	1
Utilities	0	1	0	0	0	0	0
Totals	57	151	38.5	8	6	151	37
Total Curriculum	208	247		Total Curriculum	165	202	

Old Curriculum				Combined Curriculum			
	Lecture	Practical	Online	Lecture	Lab	Practical	Online
CTBS	0	0		0	0	0	1
Orientation	0	0	0	0	0	0	0
Foam & Flammable Liquids	4	8	0	0	0	8	2
FFII FFI skills review	0	12	N/A	0	0	0	N/A
Assist Rescue Teams	0	0	N/A	0	4	0	1
Communication II	0	0	N/A	0	0	0	1.5
Preplan / inspection	2	0	0	0	0	0	2
Public Education	2	0	0	0	0	2	1
Fire Cause and Determination	4	0	0	0	0	2	1
Fire Detection Suppression	4	0	0	0	0	0	2
ICS	0	8	0	0	0	0	N/A
Lifting and Jacking	4	8	0	0	0	0	N/A
Air monitoring	2	2	0	0	0	0	N/A
Rope and Rigging	4	16	0	0	0	0	N/A
Auto Extrication	4	8	0	0	4	8	2
Advanced Hose	0	0	N/A	0	0	0	1
Fire Suppression	4	8	0	0	0	8	2
FFI Safety Skills	4	4	0	0	0	0	N/A
Flashover	4	8	0	0	0	0	N/A
Totals	42	82	0	0	8	28	17
Total In Person Hours			124	Total In Person Hours			36
Total Curriculum			124	Total Curriculum			53

Standalone Curriculum			
Lecture	Lab	Practical	Online
0	0	0	1
0	0	0	0
0	0	8	2
0	0	16	N/A
0	4	0	1
0	0	0	1.5
0	0	0	2
0	0	2	1
0	0	2	1
0	0	0	2
0	0	0	N/A
0	0	0	N/A
0	0	0	N/A
0	0	0	N/A
0	4	8	2
0	0	0	1
0	0	16	2
0	0	0	N/A
0	0	0	N/A
Total In Person Hours			60
Total Curriculum			77

	Old	New	% Change
Firefighter I In-person hours	208	165	-21%
Firefighter I Total Hours	247	202	-18%
Firefighter II In-person hours	124	36	-71%
Firefighter II Total Hours	124	53	-58%
Firefighter I & II In-person hours	332	201	-39%
Firefighter I & II Total Hours	371	255	-31%