STATE FIRE							
STANDARD OPERATING GUIDELINE							
STATE FIRE ACADEMY							
SUBJECT: High School/Career & Technology Firefighter I and II Program							
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I. <u>Purpose</u>

Fire service training for youths over the age of 16 is recognized by the fire service in the State of South Carolina as a valuable means of recruiting and retaining future volunteer and career firefighters. This document provides an overview of the requirements for establishing Firefighter I and Firefighter II courses at South Carolina High School & Career and Technology Centers (CTCs). The goal is to help program leaders and administrators establish fire service training that complies with the rules and instructional objectives set forth by National Fire Protection Association (NFPA) 1001, *Standard for Fire Fighter Professional Qualifications*. This information also is intended to help ensure the consistency and effectiveness of firefighter programs offered throughout the state.

II. <u>Scope</u>

This policy affects those involved in the implementation of a High School/CTC Firefighter I & II program: South Carolina Fire Academy staff, Sponsoring Fire Departments, as well as the High School/CTC program instructor, participating students and their parents/guardians.

III. <u>Statement of Guidelines</u>

- A. Program Overview
 - 1. Program Scheduling

The liaison for the sponsoring fire department must notify the South Carolina Fire Academy of the intent to teach a course by mid-summer and provide an estimate of the number of students for the program by the end of the first week of school.

2. Course Curriculum

This program will require coursework to include; First Aid & CPR, Firefighter I, Hazardous Materials Awareness (HMA), Hazardous Materials Operations (HMO), Firefighter II, and

Basic Auto Extrication (BAE 3330). These curriculum materials can be acquired from the South Carolina Fire Academy.

Any supplemental learning materials instructors wish to use in their courses should be written at a level comparable with the students' general reading abilities.

For complete descriptions of South Carolina Fire Academy courses, refer to the Fire Portal for course descriptions.

Note: Junior Member Program participants are not eligible for electronic course registration through the Fire Portal. Participants must utilize the paper Course Registration Form for Junior Member Program Participants.

3. Course Design & Structure

The exact duration of the Firefighter I and Firefighter II courses will vary, depending on the seat time required to fulfill the requirements for NFPA, including the prerequisites and testing.

A Firefighter I course typically requires approximately one school year (two semesters, 150 hours). The cognitive portions of the training may be delivered in self-directed online setting, in a traditional classroom setting or a blend of both. First Aid/CPR training may be taught before the course begins or during the first week of classes. Instructors may choose to design the course so that students complete HMA requirements through an online course on their own before the Firefighter I course begins. Providing an introduction to the fire service rank structure early in the program helps students put prerequisite training in the fire service context.

In some instances, High School/CTC fire instructors administer HMO *after* completing the Firefighter I course curriculum and testing. This course design helps maintain student interest by getting them in bunker gear as quickly as possible. This also gives students a break in the hazmat content, which some students may find challenging. If following this plan, Firefighter I certificates are withheld from students until they have successfully completed HMO training.

School leaders should determine the most appropriate teaching method and time schedule for their particular program. The class teaching schedule and syllabus can be adjusted accordingly. Depending on the schedule chosen, an occasional Saturday lecture, skill training session or field trip may be needed in order to provide enough class time to meet the overall course requirements.

- 4. Prerequisites
 - a. 1196-Firefighter I Program

Before beginning a Firefighter I course, students must successfully complete the following prerequisites. If students do not have the prerequisites before entering the Firefighter I program, the prerequisites must be incorporated into the course content.

Students must pass the End of Course exam and all evaluated skills with a 70 or higher to receive South Carolina Fire Academy transcript credit.

- First Aid & CPR: This training, which may be based on any recognized accredited course, such as those offered through the American Heart Association or American Red Cross.
- Hazardous Materials Awareness
- Hazardous Materials Operations

Note: Beginning with school year 2018-19 HMA and HMO must comply with NFPA 1072 Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications.

b. 1197-Firefighter II Program

Before beginning a Firefighter II course, students must successfully complete the 1196-Firefighter I program and the following prerequisite. If students do not have the prerequisite before entering the Firefighter II program, the prerequisite must be incorporated into the course content. Students must pass the End of Course exam and all evaluated skills with a 70 or higher to receive South Carolina Fire Academy transcript credit.

- Basic Auto Extrication (BAE 3330)
- 5. Class Size & Instructor Ratio

Class size should be limited to 25 students, according to South Carolina Fire Academy requirements. Additional instructors must assist with moderate/high risk activities, such as live burns. Firefighters from the host fire department are strongly encouraged to assist with classroom and fire ground training activities. Each skill sheet in the South Carolina Fire Academy curriculum specifies the need for additional instructors.

6. Facilities & Equipment

Any facility or equipment item available to the training program may be used. The host fire department should loan bunker gear, SCBA and PASS devices, cylinders, tools, equipment, apparatus and other items not owned by the school. However, all equipment must meet applicable NFPA requirements and safety standards.

- a. Each firefighter student should have access to:
 - A full set of bunker gear (turnout coat and pants; flash hood; structural firefighting boots, gloves and helmet; safety glasses or goggles).
 - Basic hand tools, tarps and ropes.
 - A computer connected to the internet. Computer and internet connection needs will vary over time. Please contact the South Carolina Fire Academy for the latest technology requirements.
 - A classroom with adequate lighting, heating, plumbing, ventilation and seating.
- b. Facilities and equipment required for conducting fire training typically include, but are not limited to, the following types of items:
 - A multiple-story tower-type structure, where students can use ladders, advance hose lines, perform simulated rescues and hoist equipment.

- Structures and training devices that allow for forcible entry and ventilation drills on doors, windows, roofs, floors, ceilings and partitions.
- Hydrant and/or drafting facilities.
- Facilities for live fire training that will, when required, permit the use of breathing apparatus in an enclosed structure, and will enable students to practice extinguishing flammable liquid, propane and natural gas and vehicle fires.
- Pumper, ladder and other necessary apparatus.
- Extinguishers, ladders, nozzles, tools, appliances and equipment necessary to meet minimum training requirements.
- A sufficient number of self-contained breathing apparatus (SCBA) for use by firefighters engaged in training in hazardous atmospheres.

If a school does not have access to equipment and facilities and only has very limited/minimal support from a fire department, then they cannot offer an NFPA -level firefighter course. A school in this situation could consider offering an introductory-level course available through the Department of Education. This introductory level course is also available for students under 16 years of age.

<u>Note</u>: The above lists provide an overview of equipment needs and is not intended as a required purchase list. Each skill sheet in the South Carolina Fire Academy curriculum includes a list of equipment and props needed in order to perform the specific type of training. Carl D. Perkins grants or other funding obtained through organizations may be available to purchase equipment for school firefighter programs. Requests for funding should be made through the school program's regional supervisor.

- 7. Program Credit
 - a. School Program Credit

Academic testing and school credit requirements should be established by the school system and the course coordinator. Successful completion (cumulative score) of the Firefighter I or II program and the prerequisites allows a student to receive high school transcript credit.

- b. South Carolina Fire Academy Program Credit
 - 1196-Firefighter I Program: Successfully passing all prerequisites, the End of Course exam and skills testing with a 70 or higher will allow a student to receive South Carolina Fire Academy transcript credit for HMA, HMO, and Firefighter I. Students with South Carolina Fire Academy transcript credit for 1196-Firefighter I and all prerequisites may take the Firefighter I written challenge exam to receive a FFI IFSAC/ProBoard certificate.
 - 1197-Firefighter II Program: Successfully passing all prerequisites, the End of Course exam and skills testing with a 70 or higher will allow a student to receive South Carolina Fire Academy transcript credit for Auto Extrication and 1197-Firefighter II. Students with South Carolina Fire Academy transcript credit for Firefighter II and all prerequisites may take the Firefighter II written challenge exam to receive a FFII IFSAC/ProBoard certificate.

• The end-of-course 1196, 1197 & HMO exams are provided to and administered by the program instructor; however, all graded answer sheets (provided by the South Carolina Fire Academy) should be submitted in the completed course paperwork package.

<u>Note:</u> Challenge exams are provided by South Carolina Fire Academy regional offices following the South Carolina Fire Academy Accreditation/Certification Procedures policy.

c. College Credit

An articulation agreement between South Carolina Fire Academy and the SC Technical College system may allow students to receive credit at one of the 16 SC Technical Colleges. Students should check with the Technical College of their choice to see if credit is available.

8. Retesting

Retesting in this program follows the South Carolina Fire Academy Retesting Policy.

9. Program Fee

The South Carolina Fire Academy requires a \$5 registration fee for each student's enrollment in Hazardous Materials Awareness, Hazardous Materials Operations, Basic Auto Extrication, Firefighter I and Firefighter II.

- B. Eligibility
 - 1. Students

Students who are not formally enrolled in a high-school/CTC 1196-Firefighter I or 1197-Firefighter II program may not participate in any activities in the course.

To train to the level of NFPA 1001 students must:

- Be at least 16 years of age.
- Be a Junior Member or an Explorer (uncompensated). The SC State Firefighters' Association can provide information about establishing a Learning for Life/Explorer program. There are fees and training requirements associated with establishing a post.
- Be enrolled in a South Carolina Career and Technology Center, high school or a similarly qualified academic institution.
- Meet the grade requirements of their school and remain in good academic standing while in the course.
- Provide a copy of the sponsoring fire department's liability insurance for Junior Firefighters or provide proof of personal insurance. (Copies maintained by the CTC/HS)
- Pass a physical exam that includes clearance for using SCBA.
 - Minimum requirement: Sports Exam
 - Recommended requirement: A physical that meets the intent of NFPA 1582. These job requirements should be shared with the licensed medical practitioner who performs the students' exams.
- Be Fit Tested by the Sponsoring Fire Department.

- Before the course begins, disclose information about a physical or learning disability that could potentially affect classroom or fire ground performance or safety.
- Complete and submit the Course Registration Form for Participants in Junior Member Programs. Note: Junior Member Program participants are not eligible for electronic course registration through the Fire Portal. Participants must utilize the paper Course Registration Form for Junior Member Program Participants.
- Comply with class attendance requirements throughout the duration of the course.
- Approved Student Activities
 The Junior Member Program Policy includes the approved Course List for Junior Member Program Participants.
- 2. Program Instructors

The classroom instructor must receive/maintain instructor certification from the South Carolina Fire Academy. To earn South Carolina Fire Academy instructor certification, an instructor must hold current specialty classification for the course they are teaching (such as Firefighter I, Firefighter II, or other courses being taught). The South Carolina Fire Academy will provide assistance to High School/CTC instructors to help them complete the appropriate training. This may be achieved through regular Instructor Orientation Workshops, Accelerated Instructor Orientation Workshops, or a customized process arranged through the Regional Office. High School/CTC instructors will be required to maintain certification with South Carolina Fire Academy by attending Instructor recertification workshops.

South Carolina Fire Academy instructors may also choose to complete one of the alternative pathways if they wish to pursue state teacher certification. For more information, review the following resources on the State Department of Education website.

- Educator Services: <u>https://ed.sc.gov/educators/</u>
- South Carolina Educator Certification Manual <u>https://ed.sc.gov/educators/certification/apply/</u>
- Alternative Pathways to Licensure: <u>https://ed.sc.gov/educators/teaching-in-south-carolina/cte/fields/</u>

<u>Note</u>: As part of course evaluations and as a means to improve the course delivery and structure, students may be asked to complete confidential questionnaires concerning demographic information, their opinion of assignments and activities, the textbook and other components of the curriculum. No opinions should be reported as coming from any individual without the consent of the student and parent.

C. Stakeholder Responsibilities

1. Sponsoring Fire Departments

High School/CTC Firefighter programs must be affiliated with or sponsored by a fire department or qualified fire agency. A relationship between the fire instructor or program leader and the sponsoring fire department/agency must be maintained to ensure the active involvement of fire department members in the mentoring of students, facilitating student

career development and assisting with classroom instruction, skills training and field trips. Since High School/CTC fire training provides a recruitment base, it would be appropriate for a sponsoring department to assist with funding South Carolina Fire Academy student registration fees.

Firefighters from local departments may serve as classroom and fire ground teaching assistants. The Fire Chief of the sponsoring fire department must qualify and certify his personnel to the tasks assigned and to ensure compliance with state regulations and federal child labor laws.

Fit testing for SCBA is the responsibility of the sponsoring fire department. Specific requirements may vary according to the department.

The sponsoring fire department is the point of contact for the high school. The liaison for the sponsoring department will be responsible for contacting the regional office with all request and questions concerning the program.

2. Guidance Counselors

Guidance/career counselors should understand the physical requirements and nature of the course before enrolling students in fire service training. They should also understand that textbooks are written at the college level. While firefighting is a physical activity, it also requires a high level of cognitive work and testing. Students with disabilities who are admitted to the program should have an individualized education plan (IEP) for them to complete the course. The program instructor of the Firefighter I and II program may meet with the special education teachers to develop a student's IEP. While reasonable accommodations for a student with special needs must be made so they can complete the course in some sort of achievable fashion, a student cannot qualify to take an exam for South Carolina Fire Academy transcript credit or IFSAC/ProBoard certificate if s/he is unable to meet the full requirements for becoming a professional firefighter.

3. Program Instructors

Before the beginning of a Firefighter I or II course, it is strongly recommended that instructors hold a meeting for students and their parents/guardians. Participants in the course will be exposed to physical and mental stress beyond those experienced in a typical classroom setting. Instructors should ensure parents are aware of the nature of the course. To make sure all of those involved are fully informed, instructors should provide a packet that includes the following types of information:

- Letter from the school's top administrator and/or the course coordinator or department head.
- An overview of the NFPA standards on which courses are based.
- A description of the course and course syllabus.
- Location of off-campus sites where training will be conducted.
- Grooming and clothing requirements.
- Prerequisites for training.
- Physical training expectations during the course.

- Explanation of possible risks of injury associated with fire suppression and other training activities.
- Expectations for class grades, personal conduct, class assignments, attendance and daily preparation.
- Computer and internet access requirements.
- Proof of insurance.
- Physician's physical for the respiratory evaluation for SCBA use (Junior Members will be given a physical exam through their sponsoring fire department).
- Checklist of required forms, documents and prerequisite tasks.
- Course Registration Form for Participants in Junior Member Programs. Note: Junior Member Program participants are not eligible for electronic course registration through the Fire Portal. Participants must utilize the paper Course Registration Form for Junior Member Program Participants.
 - Required parental approval forms.
 - Required host department Chief's approval.
- Written permission for use of photos on web pages, social media and printed publications of students engaged in classroom and skill activities.
- Written permission for students to participate in academic research.

IV. Attachments

- A. NFPA 1582 Essential Job Tasks & Descriptions
- B. Course Registration Form for Participants in Junior Member Programs

V. Interpretation Contact

A. Curriculum Manager

NFPA 1582, CHAPTER 5, SECTION 5.1 - ESSENTIAL JOB TASKS AND DESCRIPTIONS

- 1. Performing fire-fighting tasks (e.g. hose line operations, extensive crawling, lifting and carrying heavy objects, ventilating roofs or walls using power or hand tools, forcible entry), rescue operations, and other emergency response actions under stressful conditions while wearing personal protective ensembles and self-contained breathing apparatus (SCBA), including working in extremely hot or cold environments for prolonged time periods.
- 2. Wearing an SCBA which includes a demand valve-type positive-pressure face piece or HEPA filter masks, which requires the ability to tolerate increased respiratory workloads.
- 3. Exposure to toxic fumes, irritants, particulates, biological (infectious) and non-biological hazards, and/or heated gases, despite the use of personal protective ensembles and SCBA.
- 4. Depending on the local jurisdiction, climbing six or more flights of stairs while wearing fire protective ensemble weighing at least 50 lb (22.6 kg) or more and carrying equipment/tools weighing an additional 20 to 40 lb (9 to 18 kb).
- 5. Wearing fire protective ensemble that is encapsulating and insulated, which will result in significant fluid loss that frequently progresses to clinical dehydration and can elevate core temperature to levels exceeding 102.2°F (39°C).
- 6. Searching, finding, and rescue-dragging or carrying victims ranging from newborns up to adults weighing over 200 lb (90 kg) to safety despite hazardous conditions and low visibility.
- 7. Advancing water-filled hose lines up to 2¹/₂ in. (65 mm) in diameter from fire apparatus to occupancy [approximately 150 ft (50 m)], which can involve negotiating multiple flights of stairs, ladders, and other obstacles.
- 8. Climbing ladders, operating from heights, walking or crawling in the dark along narrow or uneven surfaces, and operating in proximity to electrical power lines and/or other hazards.
- 9. Unpredictable emergency requirements for prolonged periods of extreme physical exertion without benefit of warm-up, scheduled rest periods, meals, access to medication(s), or hydration.
- 10. Operating fire apparatus or other vehicles in an emergency mode with emergency lights and sirens.
- 11. Critical, time-sensitive, complex problem solving during physical exertion in stressful, hazardous environments, including hot, dark, tightly enclosed spaces that is further aggravated by fatigue flashing lights, sirens, and other distractions.
- 12. Ability to communicate (give and comprehend verbal orders) while wearing personal protective ensembles and SCBA under conditions of high background noise, poor visibility, and drenching from hose lines and/or fixed protection systems (sprinklers).
- 13. Functioning as an integral component of a team, where sudden incapacitation of a member can result in mission failure or in risk of injury or death to civilians or other team members.

This information is provided as a general guideline.

A complete copy of the NFPA 1582 standard can be viewed or purchased directly at www.nfpa.org.





South Carolina Fire Academy		JUNIOR MEMBER PROGRAMS	
Course Code/Section Nu.	Course Title	Date	Location
Student Information			
SCFID#	_ Gender:	Date of Birth:	Age:
Minor's Last Name:		First Name:	Middle Initial:
Mailing Address:			
City:	SC Zip:	County	·
Daytime Phone:	Home Phone:	Email:	
Fire Department Information	on		
Fire Department Name:		FDI	D#:
Complete only if student is an	Explorer Firefighter: BSA	Post #: BSA Con	uncil Name:

Parent/Legal Guardian Information, Release and Authorization

Participants of Junior Member Programs attending South Carolina Fire Academy courses must be at least 16 years of age on the date of course start. The student must read and sign this form where indicated. A parent or legal guardian must review and sign this form in the designated area. The Fire Chief of the Fire Department sponsoring the student must sign this form.

The South Carolina Fire Academy is authorizing the above applicant, who is at least 16 years of age and a registered participant of Junior Member Program, as defined by the *Junior Member Program Policy*, in his/her department, to participate in the above course. Upon successful completion, the course certificate is not valid until the student's eighteenth (18th) birthday.

Parent Initials_____ Student Initials_

In consideration for participation in South Carolina Fire Academy training, I hereby release, indemnify, and covenant not to sue the South Carolina Fire Academy, S. C. Department of Labor, Licensing and Regulation, the State of South Carolina, their officers, agents or employees (Releasees), as well as any other students or instructors, from any liability, claims, cost and causes of action arising out of, or related to, any property damage or personal injury, including death, that may be sustained by this minor while participating in such activity, or while on the premises owned, leased or used by Releasees.

Parent Initials

Student Initials

I acknowledge the training involves physical and strenuous activities in which the minor is capable of fully participating, know of no heart disease, epilepsy, emphysema, lung disease or other physical or mental condition that would preclude the minor from full participation in this training. I understand that the nature of the tasks the minor will have to perform while involved in this training may require a high degree of physical fitness, agility, and dexterity, and that this may include rigorous exercises which requires physical fitness, strength and stamina while wearing full protective clothing and a self- contained breathing apparatus. I am fully

other related injuries, and I choose to voluntarily allow and their property. I verify that my minor child has ha course start date that meets the requirements of OSHA Parent Initials	d rescue training , including, but not limited to, burns, this minor to participate in the activity with full knowl a medical evaluation by a physician or other licensed 1910.156 for fire brigades and 1910.134 for wearing a s Student Initials	edge that said activity may be hazardous to the minor d health care professional within six (6) months of the elf-contained breathing apparatus.
Academy. I understand that falsifying information or and/or loss of course credit.	orrect. The student (minor) agrees to abide by the rule violating rules or procedures may result in the minor be	
I authorize the release of any information concerning parent/guardian, the fire chief or the fire department to	Student Initials ng the minor's enrollment and completion of this Sour raining officer. Student Initials	uth Carolina Fire Academy course to the minor, the
also give permission for the staff of the South Carolina event that the listed emergency contact persons canno and administer treatment, including hospitalization for	Fire Academy to release records necessary for insurance Fire Academy to provide, or arrange, necessary related of be reached in an emergency, I hereby give permission the participant named above. I further understand that Student Initials	treatment or transportation for my minor child. In the n for South Carolina Fire Academy personnel to secure
the participant. This may range from on-site treatment Fire Academy does not provide travel, medical, health of	orted to the course instructor immediately, who will have , to ambulance transportation to a local hospital emerge or worker's compensation insurance. Student Initials	
	e the South Carolina Fire Academy permission to repro	oduce and publish his/her name and/or photographic
Parent Initials	Student Initials ous nature of this training, and give permission to the S	outh Carolina Fire Academy to allow my minor child to
	Student Initials	
By my signature below as parent/guard charges.	ian, I verify insurance coverage and acce	ept responsibility for all related medical
Signature of Parent/Legal Guardian:		Date:
Printed Name of Parent/Legal Guardian:		
Parent/Legal Guardian Phone Number:		
Signature of Minor Application:		Date:
Printed Name of Minor Applicant:		
Fire Chief Initials I understand that this training is not valid until this min Fire Chief Initials	f a Junior Member Program sponsored by, or associated	
Fire Chief Initials		
By my signature below as Fire Chief, I ve beginning of course.	rify that this student has worker's compe	ensation insurance coverage prior to the
Signature of Fire Chief:		Date:
Printed Name of Fire Chief:		
Fire Chief Phone Number:		
SCFA Registration Use Only		
Check # P/O#	Received From:	Refund Amount \$ Reason: