



South Portland, Maine 04106
Fire Science Department

Title: Fire Studies & Stayin’ Alive FIG	Catalog Number: FIRE 105 / FIGS 101
Credit Hours: 4	Total Contact Hours: 60
Methods: Lecture/Tours/Projects/Reports	Course Location: SMCC + Various Field Sites

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Course Syllabus

Course Description

This course introduces students to the culture, history and a wide range of career opportunities available in the fire and EMS services and related fields, as well as practice in developing the growth mindset and personal + professional atomic habits necessary for college-level academic and career success. Students will examine the organization and function of public and private fire protection services, the roles of the fire + EMS services in local government, and the laws and regulations affecting fire and EMS service, as well as requirements and benefits of a variety of career options. Basic fire-EMS concepts and terms will be introduced, as well as the mission, goals, and comprehensive approaches to community risk reduction. **This course includes FIGS 101 Stayin’ Alive FIG. Students who successfully completed this course will earn FIG credit.** Those students with significant fire service experience and/or who have completed 18 Fire Science (FIRE) credits may petition the Fire Science department chair to substitute a fire or EMS elective course.

In Fall 2021 this course will be offered in hybrid mode, with weekly face to face (for Sections 02+03) and Zoom class meetings and online content + assignments. Section 01 will meet exclusively via Zoom. Sections 02+03 of the course will meet face to face during the assigned class times, and all sections will meet for a “Friday Follow-up” each week via Zoom. Student attendance and engagement in all sessions will be required and documented. All face to face class, peer mentor-mentee and student accountability team meetings will follow the MCCS and MCDC COVID vaccination requirements and precautions in effect at the time.

Fire Science Learning Outcomes

Successful completion of an associate’s degree in fire science from Southern Maine Community College will enable students to:

- 1) Analyze and apply proactive community risk reduction methods to protect people, property and natural resources.
- 2) Analyze and apply reactive community risk response methods to protect people, property and natural resources.
- 3) Analyze and apply community risk reduction leadership + management methods to protect people, property and natural resources.

Course Outcomes

Upon successful completion of this course, the student will be able to:

- 1) Relate the history of the fire service to current and future fire protection challenges.
- 2) Describe the mission, goals, components and methods of the fire and emergency services.
- 3) Explain knowledge, skills and attitudes necessary for academic and career success.
- 4) Explain the mindsets and skillsets necessary for placement in a variety of fire and emergency services
- 5) Develop a plan for meeting the Fire Science learning outcomes and career entrance requirements.

Course Objectives

1. Demonstrate college-level academic and career-entry habits of success including self-assessment, planning, goal setting, time management, note-taking, self-discipline, collaboration and classroom engagement skills.
2. Analyze the mission of fire protection agencies and explain how the use of proactive, reactive and leadership-management methods for effective community risk reduction.
3. Network with classmates, peer mentors, faculty members, guest speakers and other fire protection and allied professionals to develop personal and professional relationships that support academic and career success and to gain insights and feedback on progress toward goals.
4. Recognize and value the fire service's level of public trust, obligations to self, team-members and citizens for maintaining excellence in preparation and customer service.
5. Illustrate and explain the history of fire and EMS services.
6. Analyze the basic components of fire as a chemical chain reaction, the major phases of fire, and examine the main factors that influence fire spread and fire behavior.
7. Differentiate between fire service training and education and explain the value of higher education to the professionalization of the fire-EMS service and the student's success.
8. List and describe the major organizations that provide emergency response service and illustrate how they interrelate.
9. Identify the knowledge, skills and attitudes necessary for successful fire protection and emergency-service careers in both the public and private sectors.
10. Define the role of national, state, and local support organizations in fire and emergency services.
11. Discuss and describe the scope, purpose, and organizational structure of fire and emergency services.
12. Describe the common types of fire and emergency service facilities, equipment and apparatus.
13. Compare and contrast effective management concepts for various emergency situations.
14. Identify the priorities community risk reduction including code enforcement, public education, public and private protection systems and emergency response.
15. Develop and present a Course Portfolio that explains the mission and goals of the student's chosen career and SMCC program of study; and details the student's self-assessment, reflections and efforts to develop the personal, academic and professional habits and skills necessary for success.

Topical Outline

(See attached schedule/topical outline)

Course Requirements

Students are expected to complete pre-class assignments, attend all classes, take notes, and actively participate in classroom discussions and group assignments. There are weekly written assignments and student individual and group presentations. Online and in-class quizzes and tests will assess student academic progress.

Student Evaluation and Grading

Assignments (incl. FIG)	20%
Pre-Class Note-Taking Guides	20%
Online Chapter Quizzes	10%
Writing Projects	20%
Portfolio Document + Presentation	20%
Final Exam	10%

Required Texts

1. FIRE 105 / FIGS 101 Fall 2021 Task Book: (Open resource files posted in Brightspace)
2. Introduction of Fire Protection & Emergency Services, 6th ed. text and Nav2 Advantage Access – ISBN# 9781284180152
3. HeartCode® BLS AHA Product Number 15-3254, ISBN: 978-1-61669-748-8 (Purchase from American Heart Association: <https://shopcpr.heart.org/heartcode-bls>). Not available @ SMCC Bookstore.

Student Face to Face and Zoom Classroom Behavior & Expectations

- *Students are expected to attend the entire time of all classes. You are expected to arrive to class on time, with your pre-class work done. Absences from class – or lack of engagement and response to questions during Zoom class - regardless of reason, will be recorded, and may result in a failing course grade (see details below).*

- **Students are expected to stay engaged in class, whether face to face or via Zoom.** Stay on task. Keep your camera on. Please do not be distracted by personal discussions, electronic devices, etc. during class. Live-in students who respond to emergencies during class time will be marked absent during the time away from class.
- **Students are expected to submit original work unless other sources are clearly credited.** Students are expected to equitably share the load in group work. Cheating will not be tolerated. Students found cheating may result in penalizing actions up to and including a failing grade in this course following policies in the student code of conduct.
- **Students are expected to prepare for class and complete all assignments.** Readings and homework provide the foundation for class lectures, discussions and projects. Weekly quizzes will be given over the assigned readings. Homework will be assigned each week and must be submitted at beginning of the next class. *You cannot pass this course without doing your homework every week!*
- **Students are expected to take notes during class.** Notes and handouts should be organized in your Task Book binder. This is a class requirement and will be graded. *If it's on the whiteboard or in PowerPoints it should be in your notes!*
- **Students are expected to respect the classroom, fellow students and faculty.** Listen thoughtfully when others speak, even if you disagree with what they are saying. Challenge your own notions. Defend your positions with facts.
- **Students are expected to actively participate and think critically.** This is necessary for knowledge sharing and to get the most from practice/application opportunities.
- **Students are expected to set pagers, or cell phones on vibrate** during class time and ignore unless emergency.
- **Students are expected to not use tobacco of any kind in the classroom.** Food and drinks should be used respectfully of others and the facility.
- **Students are expected to doff hats and not wear any distracting attire** during class time.
- **Students will be held accountable.** For working hard, staying engaged, persisting, asking for help as needed (earlier, rather than later), taking responsibility and holding yourself accountable, meeting expectations + mastering course materials.

Homework and Written Assignments

Assignments, typed in specified formats (APA, etc.) will be due as noted on the schedule and in Brightspace. Late assignments (papers, take-home quizzes, etc.) will be accepted only up to 1 week late (no exceptions) and will receive a maximum grade of 50% unless prior authorization is given by the instructor. If you miss class, it is your responsibility to submit your work by the deadline. All written assignments (other than your class notes) are to be typed neatly, spell- and grammar-checked, and in MSWord DOCX file format (or PDF for scanned documents).

Attendance + Participation

Attendance and engagement will be checked and recorded by instructors multiple times during face to face and Zoom classes, and will affect a student's course grade. SMCC requires instructors to report the names of students to the registrar's office who stop attending class. *Missing a portion of a face to face or Zoom class will be recorded as one-half an absence. For the purpose of this class, instructor will report students as no longer attending after two consecutive – or a total of three -- absences from the class, resulting in a grade of "AF" being recorded for the student. FMI, please refer to the SMCC Student Handbook. Students are expected to notify the instructor, in advance, concerning absences. Students are responsible for all material – and meeting deadlines – regardless of absences.*

If you are "on call" during class: Students are prohibited leaving class to respond from SMCC campus to their on-call communities for emergency calls. If students attending Zoom classes from on-call stations leave class to respond, they will be marked absent from class. As stated above, multiple absences will result in course failure.

Task Book (Open Resource)

The task book will be the student's organizer, ongoing record of work completed and course portfolio for the student's final presentation near the end of the course. The task book documentation and presentation will be graded. Students should insert in their task book (or organize electronically) all graded work returned/graded by the instructor, as well as course portfolio materials, and keep an up-to-date record of all work submitted and returned throughout the semester.

Video Tours and Career Options Presentations

To broaden your knowledge of Fire and EMS Services and career opportunities, we'll offer virtual visits and pre-recorded presentation. An organizational rep will provide a tour of the facility and share what they do and how they do it. In order to give you an opportunity to ask questions, someone from each organization will join us during our Friday Zoom Follow-Up the week of the scheduled field trip.

The goal of our Career Options Days is to give our first-year Fire Science students a glimpse at a broad range of career options. One of our instructors, Mara DeGeorge, has met with folks from the Fire Marshall's office, EMA, Wildland FF,

Paramedicine, Bureau of Labor Standards, Private Industry, WETeam, HAZMAT, and more, to learn what they do, how they do it, and why they do it.

The link to the field trip or career options pre-recording will be posted in Brightspace in the week in which we will discuss it. You are expected to watch the video prior to your class session and be ready to participate in a discussion on what you saw and what interests you, and complete a writing assignment summarizing your understanding of the duties and responsibilities associated with being a member of each organization, identify key takeaways, include any topics that were not clear or that you found interesting, and share what mattered to you and how you connect with it.

Mid-Term Grades

After students have completed Week 10 of the course, mid-term grades will be posted for all students. Those demonstrating unsatisfactory performance will be required to meet with the instructors and peer mentor and develop a plan for course success. Unsatisfactory performance is determined by a combination of grades, attendance + habits of success.

End-of-Course Evaluation and Feedback

Students must complete evaluations for each course attended at SMCC. Evaluations are submitted online and can be accessed through the student portal site. Students can access the course evaluation report beginning two weeks before the end of classes. The deadline for submission of evaluations occurs 24 hours after the last day of classes each semester. Instructors will announce when the online course evaluation is available. Course evaluations are essential to instructor and course improvement.

Add-Drop Policy

Students who drop a course during the one-week “add/drop” period in the fall and spring semesters and the first three days of summer sessions receive a 100% refund of the tuition and associated fees for that course. Please note any course that meets for less than the traditional semester length, i.e., 15 weeks, has a pro-rated add/drop period. There is no refund for non-attendance. **Add/drop deadline for each semester is Tuesday of Week 2 @ 1700 hours.**

Withdrawal Policy

A student may withdraw from a course only during the semester in which s/he is registered for that course. The withdrawal period is the second through twelfth week of the fall and spring semesters and the second through ninth week of twelve-week summer courses. This period is pro-rated for shorter-length courses. To withdraw from a course, a student must complete and submit the appropriate course withdrawal form, available at the Enrollment Service Center (no phone calls, please). The designation “W” will appear on the transcript after a student has officially withdrawn. A course withdrawal is an uncompleted course and may adversely affect financial aid eligibility. Failure to attend or ceasing to attend class does not constitute withdrawal from the course. There is no refund associated with a withdrawal.

Plagiarism Statement

Students are responsible for adherence to ethical academic standards. Cheating is a serious offense, whether it consists of taking credit for work done by another person or doing work for which another person will receive credit. Taking and using the ideas or writings of another person without clearly and fully crediting the source is plagiarism and violates the academic code as well as the Student Code of Conduct. If it is suspected that a student in any course in which s/he is enrolled has knowingly committed such a violation, the faculty member will refer the matter to the College’s Disciplinary Officer and appropriate action will be taken under the Student Code of Conduct. Sanctions may include suspension from the course and a failing grade in the course. Students have the right to appeal these actions to the Disciplinary Committee under the terms outlined in the SMCC Student Code of Conduct.

ADA Syllabus Statement

Southern Maine Community College is an equal opportunity/affirmative action institution and employer. For more information, please call 207-741-5798. If you have a disabling condition and wish to request accommodations in order to have reasonable access to the programs and services offered by SMCC, you must register with the disability services coordinator, Sandra Lynham, who can be reached at 741-5629. Documentation must be supplied to your instructor before accommodations can be given. Further information about services for students with disabilities and the accommodation process is available upon request at this number.

SEE STUDENT HANDBOOK FOR OTHER ACADEMIC POLICIES

Fall 2021 FIRE 105 / FIGS 101 Schedule Update: (Update: 8/23/21)

Week	Section/Day/Time: 01 Tues: Zoom class. No face to face. 02 Wed. + 03 Thurs. face to face at SMCC Howe Hall. Friday Follow-up via Zoom: 0900-1030 Hrs.	Topics / Instructor + Student Assignments	Read each Chapter + Post PCNTG before Class. Assignments + Quizzes Due Sunday @ 2330 hrs.	FIG Topic, Readings + Disc. (draft)
1	01 Tues., 8/31/21, 1200 – 1400 hrs. 02 Wed., 9/1/21, 0800 – 1000 hrs. 03 Thurs., 9/2/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	-Welcome, Expectations, Mentoring, Growth Mindset. + Habits Intros. (Blue = Fri.)	-Icebreaker + Attributes -Course Overview + Task Book Review -Mentor Intro + Request Form (20m MS) -Brightspace Intro + 2 assignments (20m) -Growth M-set + Habits Intro + Asmt. (MDG) =168-hr. Schedule for Week 2 -Acct. Team Intro + Request Form (MDG)	-Get textbook + task book + find Task Book in Brightspace -Post Peer Mentor + Accountability Team Request forms by Friday @ 2330 hours
2	01 Tues., 9/7/21, 1200 – 1400 hrs. 02 Wed., 9/8/21, 0800 – 1000 hrs. 03 Thurs., 9/9/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	Budgeting + Lrning Styles Growth Mindset, Atomic Habits	-Brightspace Follow-up (20m) -VARK Learning Assessment + analysis -PCNTG preview -WISH + MMG intro + assignment -Budget Intro + assignmt.– 40 min. (MS) -AHA BLS online and hands-on sessions (ES) -Growth M/set Discussion + assignment -Atomic Habits 2 + 168-hr. Sched. (MDG)	-Acct. Team (AT) + Peer Mentor (PM) Mtg. 1 =Mtg. Doc due Sun. -Personal Budget for Wk 3 -Assign online CPR work + class date/time - Weeks 3+4. -168-hr. Schedule due
3	01 Tues., 9/14/21, 1200 – 1400 hrs. 02 Wed., 9/15/21, 0800 – 1000 hrs. 03 Thurs., 9/16/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	-Acad. + Career Success -Budgeting -Chapter 1: Fire Science Ed. (PCNTG due Sunday)	-Fire-EMS Mission Model + 5 Es of CRR -Intro textbook + PCNTGs – Assign Ch. 1 PCNTG + online quiz -Budget W/shop – 20 min’s. (MS) -Ch. 1: Academic + Career Prep: -Confirm BLS Class Times + AHA Doc. Req’t.(ES) -Atomic Habits 3: Breaking Bad (MDG)	-AT+PM Mtg. 2: Doc due Sun -Assign Intro Ch. 1 PCNTG + online quiz -AHA BLS Cert due -Personal Budget due -Ch. 1 PCNTG + Quiz due Sun. @ 2330 hrs. -Growth M-set rpt. (WA1) due
Weeks 4+5: AHA BLS Course (Off-Campus) Required of all Students without current BLS cert. (Dates TBD). AHA BLS Cert. Req’d by End of Week 3				
4	01 Tues., 9/21/21, 1200 – 1400 hrs. 02 Wed., 9/22/21, 0800 – 1000 hrs. 03 Thurs., 9/23/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	Chapter 2: Fire Careers (PCNTG due pre-class) -Nutrition-Health	Ch. 2: Career “Tree”: attributes + skillsets -Intro Portfolio Doc. + Present’n Assign’t =Port. Asmt 1: Cover Letter + Resume -Intro Nutrition + Health – 30 mins. (AS) -Atomic Habits 4: Transition to College + Procrastination (MDG)	-AT+PM Mtg. 3: Doc due Sun -Port. Asmt 1 (Cover Letter + Resume) due Sunday -WISH + MMG due -Growth M/set WA1 Feedback Assignment due
5	01 Tues., 9/28/21, 1200 – 1400 hrs. 02 Wed., 9/29/21, 0800 – 1000 hrs. 03 Thurs., 9/30/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	Chapter 3: Public Fire Protection (PCNTG due pre-class)	-Ch. 3 case studies -Intro Tours + Career Opp. Videos (MDG) -Nutrition + Health follow-up: 30 mins (AS) -Atomic Habits 5: Note Taking (MDG)	-AT+PM Mtg. 4: Doc due Sun -Healthy Food Asmt. due -Ch. 2 Quiz due Sunday
6	01 Tues., 10/5/21, 1200 – 1400 hrs. 02 Wed., 10/6/21, 0800 – 1000 hrs. 03 Thurs., 10/7/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	Ch. 4: Fire Chemistry + Physics (PCNTG due pre-class)	-Ch. 4: Fire Dynamics + Tactics Intro -SLICER-RS video - Video tour #1: Air Rescue -Live Tour follow-up and Q+As	-AT+PM Mtg. 5: Doc due Sun -Ch. 3 Quiz due Sunday -Writing Asmt #2 due Sun.
7	01 Tues., 10/12/21, 1200 – 1400 hrs. 02 Wed., 10/13/21, 0800 – 1000 hrs. 03 Thurs., 10/14/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	Ch. 5: Public & Priv. Org’s (PCNTG due pre-class)	-Ch. 5: Org’s -Portfolio: Brief Bio + Thesis Statement =Portfolio Asmt 2: Bio + TS -Academic + Career Success Plan intro -Atomic Habits 6: Time Mgmt. (MDG)	-AT+PM Mtg. 6: Doc due Sun -Ch. 4 Quiz due Sunday -Port. Asmt 2 due Sun.
8	01 Tues., 10/19/21, 1200 – 1400 hrs. 02 Wed., 10/20/21, 0800 – 1000 hrs. 03 Thurs., 10/21/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	Ch. 6 FD Resources (PCNTG due pre-class)	-Ch. 6 Apparatus + PPE, case studies -Video tour #2: Scarborough FD -Live Tour follow-up and Q+As	-AT+PM Mtg. 7: Doc due Sun -Ch. 5 Quiz due Sunday -Writing Asmt #3 due Sun.

Week	Section/Day/Time: Tues, Wed. + Thurs. face to face at SMCC (01, 02 + 03) Friday Follow-up via Zoom: 0900-1030 Hrs.		Topics / Instructor + Student Assignments	Read each Chapter + Post PCNTG before Class. Assignments + Quizzes Due Sunday @ 2330 hrs.	FIG Topic, Readings + Disc. (draft)
9	01 Tues., 10/26/21, 1200 – 1400 hrs. 02 Wed., 10/27/21, 0800 – 1000 hrs. 03 Thurs., 10/28/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	Ch. 8 Support Functions (PCNTGs due pre-class)	(Ch. 7 Portfolio extra credit) -Ch. 8 case studies -Career Options Videos #1 -Live Career Rep. follow-up and Q+As	-AT+PM Mtg. 8: Doc due Sun -Ch. 6+7 Quizzes due Sun. -Writing Asmt #4 due Sun.	
10	01 Tues., 11/2/21, 1200 – 1400 hrs. 02 Wed., 11/3/21, 0800 – 1000 hrs. 03 Thurs., 11/4/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	Ch. 9 Training (PCNTGs due pre-class)	-Ch. 9 case studies -Group Advising (Spring Semester) -Career Options Video #2 -Live Career Rep. follow-up and Q+As	-AT+PM Mtg. 9: Doc due Sun -Ch. 8+9 Quizzes due Sun. -Writing Asmt #5 due Sun.	
11	01 Tues., 11/9/21, 1200 – 1400 hrs. 02 Wed., 11/10/21, 0800 – 1000 hrs. 03 Thurs., 11/11/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	Ch. 12 Fire Prot. Systems (PCNTG due pre-class)	(Chs. 10 + 11 Portfolio extra credit) -Ch. 12 FP Systems Analysis -Port. Asmt 3: Academic + Career Success Plan - Draft 1 -Atomic Habits 7: Organization (SW)	-AT+PM Mtg. 10: Doc Sun. -Ch. 10+11 Quizzes due Sun. -Port. Asmt 3 due	
12	01 Tues., 11/16/21, 1200 – 1400 hrs. 02 Wed., 11/17/21, 0800 – 1000 hrs. 03 Thurs., 11/18/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	Chapter 13 ICS (PCNTGs due pre-class)	-Ch. 13 case studies -Port. Asmt 4: Academic + Career Success Plan - Final Draft -Presentation Skills – PVLEGS (MDG)	-AT+PM Mtg. 11: Doc Sun. -Ch. 12 Quiz due Sun. -Port. Asmt 4 due	
13	01 Tues., 11/23/21, 1200 – 1400 hrs. 02 Wed., 11/24/21, 0800 – 1000 hrs. Section 03 attend Tues. or Wed. class if possible. No Friday Follow-up	Chapter 14 Emerg. Op's + Life Safety (PCNTGs due pre-class)	Thanksgiving Week: -Ch. 14: Sixteen FF Safety Initiatives -Career Options Video #3 -(No Live Career Rep. follow-up)	-AT+PM Mtg. 12: Doc Sun. -Ch. 13+14 Quizzes due Sun. -Writing Asmt #6 due Sun.	
14	01 Tues., 11/30/21, 1200 – 1400 hrs. 02 Wed., 12/1/21, 0800 – 1000 hrs. 03 Thurs., 12/2/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	Review + Student Practice Presentations	-In-Class Presentations of Portfolios -Review and Prep for Weeks 15+16 -End-of-Semester Survey -Portfolio Practice Take-Aways (MDG)	-AT+PM Mtg. 13: Doc Sun.- All Task Book Assign'ts Due -All Draft Portfolio files due Sunday @ 2330 hours	-Practice Fac'ltrs: -SW -MDG -MS -MG?
15	01 Tues., 12/7/21, 1200 – 1400 hrs. 02 Wed., 12/8/21, 0800 – 1000 hrs. 03 Thurs., 12/9/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	Student Portfolio Presentations	-Final presentations with panelists -Prep for Final Exam - Final Portfolio Presentation Take-Aways + Final Document Q+As	-AT+PM Mtg. 14: Doc Sun. -All Final Portfolio files due Sunday @ 2330 hours	Panelists: -
16	01 Tues., 12/14/21, 1200 – 1400 hrs. 02 Wed., 12/15/21, 0800 – 1000 hrs. 03 Thurs., 12/16/21, 1000 – 1200 hrs. Friday Follow-up, 0900 – 1030 hrs.	-Final Exam -Feedback / Student Evals. -Reflections	-Final Exam (in-class prep + Q+As) -Lessons Learned -Feedback: FIRE 105/FIGS 101 Eval and SMCC online	-Lessons learned + Feedback -All parts of Final Exam due Friday @ 2330 hrs.	