

Bergen Community College
School of Business, Social Sciences, Public Service
Department of Criminal Justice and Homeland Security
Master Syllabus

FIR 104 Fire Tactics and Strategy

Date of Most Recent Syllabus Revision: November 14, 2011

Course Typically Offered: Fall Spring Summer Every Semester Other _____

Syllabus last reviewed by: _____ Date: _____

Curriculum Committee: _____ Date: _____

An individual classroom syllabus for this course must include as much of the following information as is applicable:

Basic Information about Course and Instructor

Semester and Year
Course and Section Number: [e.g., FIR 104-001]
Meeting Times and Locations:

Instructor:
Office Location:
Phone:
Departmental Secretary: [optional]
Office Hours:
Email Address:

Course Description

FIR 104 – Fire Tactics and Strategy This course provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground. Emphasis is on pre-fire planning, fire ground problem-solving, and decision-making in support of tactical deployment and strategic use of available resources.

3 lectures, 3 credits
Prerequisites: FIR 101
C-requisites: None

Student Learning Objectives: As a result of meeting the requirements in this course, students will be able to

1. To demonstrate (verbal and written) knowledge of fire behavior and the chemistry of fire.
2. To articulate the main components of pre-fire planning and identify steps during a pre-fire plan review.
3. To recall the basics of building construction and how they interrelate to pre-fire planning.
4. To recall major steps taken during “size up” (initial incident assessment) , and identify the order in which they will take place at an incident.
5. To recognize and articulate the importance of fire ground communications.
6. To create within the students a sense of organization and confidence when faced with a tactical situation of the fire ground.
7. To identify the numerous key factors requiring recognition and consideration when planning strategy and tactics.
8. To identify the various major tasks that must be performed at a structure fire and the various tactical options available and the resources needed.
9. To build within the student a respect for the dangers of firefighting and identify some safety/survival practices.
10. Identify and define the main functions within the ICS system and how they interrelate during an incident.
11. Identify and analyze the major causes involved in line of duty firefighter deaths related to health, wellness, fitness, and vehicle operation.

Means of Assessment:

Instructors will distribute grading rubrics for all written assignments.

1. Students will be able to define the concepts and basic nomenclature (including Incident Command System) utilized in the fire ground and in other critical incidents, and will be able to describe the relationship between pre-fire planning and the effective and efficient use of personnel, equipment, and apparatus. This knowledge will be assessed through active engagement in class discussions, on objective and written examinations, and/or in writing assignments.
2. Students will be expected to state the major steps in “sizing up”, and identify the order in which they take place at an incident. Furthermore students will identify the key factors requiring recognition and consideration when planning strategy and tactics. Students will demonstrate their knowledge of “size up” through class discussions, on objective and written examinations, and/or in writing assignments.
3. Students will be able to describe the chemical reaction identified as fire, and be able to explain the fire triangle, fire tetrahedron, heat transfer, stages of fire and fire classification. Students will demonstrate their knowledge of this concept through active engagement in class discussions, on objective and written examinations, and/or in writing assignments.
4. Students will be expected to describe the various major tasks that are performed at structural fires and the various tactical options available, and the role of communications in effective and efficient use of resources. Students will demonstrate their knowledge of this material through active engagement in class discussions, on objective and written examinations, and/or in writing assignments.
5. Students will be expected to recognize the dangers of firefighting, identify some appropriate safety and survival practices, and identify the major causes of in line of duty fire fighter deaths. This knowledge will be assessed through active engagement in class discussions, on objective and written examinations, and/or in writing assignments.
6. Given different scenarios, the student will set up an ICS, call for appropriate resources and bring the scenario to a mitigated or controlled conclusion.

Course Content

1. As an introduction to fire fighting tactics and strategy, students will be introduced to concepts and applications of theory and practice in the effective use of personnel, equipment, and apparatus in fire control.
2. This course serves as a foundation for advanced tactical fire science courses.
3. Various aspects of the fire fighting function of the profession are explored, including occupation specialties, career opportunities, the need for profession development and academic education, and the multiplicity of tasks required by the fire fighter and incident commanders to meet demands of the public for protection and to satisfy the mandates of government.
4. The course will focus on pre-fire planning, fire ground problem-solving, and decision-making in support of tactical deployment and strategic use of available resources.

Topic headings in this course.

1. Fire Chemistry Terms and Concepts
2. Extinguishing Equipment
3. Visual Perception & “Size Up”
4. Pre-Fire Planning
5. Engine company Operations
6. Ladder Company Operations
7. Forcible Entry
8. Ventilation
9. Basic Divisions of Tactics
10. Search & Rescue
11. Exposures
12. Confinement
13. Ventilation
14. FAST Team Concept
15. Structural Collapse
16. Homeland Security

Special Features of the Course

E.g., the use of learning technologies in the course (Internet, PowerPoint, etc.); the inclusion of technological literacy and/or information literacy learning in the course; etc.

Course Texts and/or Other Study Materials

Required Text:

Fire Officers Handbook of Tactics, 3rd. John Norman, Pennwell Publishers, 2005.
ISBN 1-59370-061

Research, Thinking, Writing, and/or Examination Requirement(s)

All students in the Fire Tactics and Strategy course will engage in one or more written assignments. These assignments may be essay questions on one or more tests, an essay test, or a short written report based on outside readings or activities.

Students should be encouraged through classroom activities to think about, analyze, and use basic fire science nomenclature in the analysis of fire protection issues. Memorization of key concepts and theories should be thought of as the first, not the final, stage of learning significant course materials.

Grading Policy

In determining a student's semester grade, a minimum of three, and preferably more, grading mechanisms should be employed. Multiple choice, matching, fill-in, true/false, and short answer questions are appropriate. Term projects and research reports may be utilized, as well as essay questions based on outside readings should be considered. If a web site for the course is developed (this is encouraged), students may also be evaluated on the basis of their participation in online discussions. Online exams are acceptable, if they are one of several assessment tools.

Grading System:

Students will be presented with a grading system for the course on the first day of the semester. The grading system will include, at a minimum, two or three components:

1. A scale for determining grades A-F, such as the following:
 - a. A = an average of 90 or higher
 - b. B+ = an average between 87 and 89
 - c. B = an average between 80 and 86
 - d. C+ = an average between 77 and 79
 - e. C = an average between 70 and 76
 - f. D = an average between 65 and 60
 - g. F = an average lower than a 65

2. An explanation for the value of course components can include as per the following:
 - a. 16 quizzes: chapter quiz given weekly 15% of final grade.
 - b. Various homework assignments 15% of final grade.
 - c. A Term paper: represents 20% of final grade.
 - d. attendance/participation represents 10% of final grade,
 - e. a mid term examination 20% of final grade
 - f. A final exam represents 20% of final grade.

Attendance Policy

BCC Attendance Policy:

All students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of each course. These will be established in writing on the individual course outline. Attendance will be kept by the instructor for administrative and counseling purposes.

College, Divisional, and/or Departmental Policy Statements

Students are expected to review and follow the following policies.

Code of Student Conduct.

Statement on plagiarism and/or academic dishonesty.

ADA statement.

Sexual Harassment statement.

Statement on acceptable use of BCC technology.

Statement on the purpose and value of faculty office hours.

Student and Faculty Support Services

The distance Learning Office-for any problems you may have accessing your online courses	Room C-334	210-612-5581 psimms@bergen.edu
Smart thinking Tutorial Service	On Line at:	www.bergen.edu/library/learning/tutor/smart/index.asp
The Tutoring Center	Room L-125	201-447-7908
The Writing Center	Room L-125	201-447-7908
The Online Writing Lab (OWL)	On Line at:	www.bergen.edu/owl
The Office of Specialized Services (for Students with Disabilities)	Room S-131	201-612-5270 www.bergen.edu/oss
The Sidney Silverman Library	Room L-226	201-447-7436

Course Outline and Calendar

UNIT	TOPIC	ASSIGNMENT
Week 1	General Principles of Fire Fighting and Extinguishing Equipment	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 1.
Week 2	Size-Up	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 2. Quiz 1-Chapter 1
Week 3	Engine Company Operations	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 3. Quiz 2 Chapter 2
Week 3	Hoseline Selection, Stretching and Placement	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 4.
Week 4	Water Supply	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 5. Quiz 3 Chapter 3 & 4
Week 5	Sprinkler Systems and Standpipe Operations	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 6. Quiz 5 Chapter 5
Week 6	Ladder Company Operations	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 7. Quiz 6 Chapter 6
Week 7	Forcible Entry	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 8. Quiz 7 Chapter 7
Week 8	Ventilation	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 9. Quiz 8 Chapter 8
Week 9	Search and Rescue	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 10. Quiz 9 Chapter 9
Week 9	Midterm	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapters 1-10
Week 10	Firefighter Safety and Survival	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 11.
Week 10	Private Dwellings	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 12. Quiz 10 Chapter 11
Week 11	Multiple Dwellings	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell

		Publishers Chapter 13. Quiz 11 Chapter 12
Week 11	Garden Apartments	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 14.
Week 12	Store Fires- Taxpayers and Strip Malls	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 15. Quiz 12 Chapters 13 &14
Week 12	Term Paper Due Date	
Week 13	High-rise Office Buildings	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 16. Quiz 13 Chapter 15
Week 13	Buildings under construction, Renovation and Demolition	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 17.
Week 14	Fire Related Emergencies	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 18. Quiz 14 Chapter 16 & 17
Week 15	Structural Collapse	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 19. Quiz 15 Chapter 18
Week 15	Fire Department Roles in Terrorism and Homeland Security	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 20. Quiz 16 Chapter 19
Week 16	Final Exam	<i>Fire Officers Handbook of Tactics</i> ,, 3rd. John Norman, Pennwell Publishers Chapters 11-20

Note to Students: This Course Outline and Calendar is tentative and subject to change, depending upon the progress of the class.

Term Paper:

Select one of the following fire reports and determine what strategies were developed to control the fire.

- Hackensack Ford, 1988, Hackensack, New Jersey
- Waldbaum’s Fire 1978, New York City
- High-rise Office Building Fire, One Meridian Plaza, Philadelphia, Pennsylvania
- World Trade Center 2001, New York, New York
- Furniture Warehouse Fire, Charleston, South Carolina
- Birmingham Bombing 1998, Birmingham, Alabama

NOTE: Other topics will be allowed at the discretion of the Instructor.

What tactics were used to meet the strategies?

What was the ICS structure that was used?

Based on what you read would you have done something different regarding strategies, tactics, and ICS and what would they have been.

Lessons learned.