

Bergen Community College  
Division of Business, Social Sciences, Criminal Justice and Homeland Security  
Department of Criminal Justice and Homeland Security  
**Master Syllabus**

**FIR 151 Fire Tactics and Strategy**

Date of Most Recent Syllabus Revision: March 31, 2009

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 151-001]  
Meeting Times and Locations:

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

**Course Description**

**FIR 151 – 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
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**Special Features of the Course** (if any) [to be designated by the instructor]

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. 2 tests: each test represents 20% of the final grade for a total of 40%
- b. 1 short scenario paper: represents 15% of final grade
- c. attendance/participation represents 10% of final grade,
- d. a cumulative final exam represents 35% 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.

#### **Fire Science Discipline Attendance Policy:**

The discipline has agreed to leave attendance policies up to the discretion of each course instructor.

#### **Attendance Policy in this Course:**

To be determined by the instructor

### **Other College, Divisional, and/or Departmental Policy Statements [optional but recommended]**

#### Examples:

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 [optional but recommended]**

List support services, e.g., the Writing Center, the Math Lab, the Tutorial Center, Online Writing Lab (OWL), Office of Specialized Services, etc.

Include a statement on the BCC Library.

Example:

Student and Faculty Support Services

<b>The distance Learning Office-for any problems you may have accessing your online courses</b>	<b>Room C-334</b>	<b>210-612-5581 psimms@bergen.edu</b>
Smartthinking Tutorial Service	On Line at:	<a href="http://www.bergen.edu/library/learning/tutor/smart/index.asp">www.bergen.edu/library/learning/tutor/smart/index.asp</a>
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:	<a href="http://www.bergen.edu/owl">www.bergen.edu/owl</a>
The Office of Specialized Services (for Students with Disabilities)	Room S-131	201-612-5270 <a href="http://www.bergen.edu/oss">www.bergen.edu/oss</a>
The Sidney Silverman Library	Room L-226	201-447-7436

### Include a Course Outline and Calendar

The Course Outline and Calendar must include all of the following elements;

- A daily or (at least) weekly schedule of topics to be covered.
- Dates for exams, quizzes, or other means of assessment.
- Due dates for major assignments-e.g., due dates for the paper(s), due dates for the project(s) etc.
- Any required special events-e.g., a lecture by a visiting speaker, a dramatic performance etc.
- A note to students stating that the course outline and calendar is tentative and subject to change, depending upon the progress of the class.

### Sample Format for Course Outline and Calendar

UNIT #	TOPIC	ASSIGNMENT
Week 1	General Principles of Fire Fighting	<i>Fire Officers Handbook of Tactics</i> ,, 3rd. John Norman, Pennwell Publishers Chapter 1.
Week 2	Extinguishing Equipment	<i>Fire Officers Handbook of Tactics</i> ,, 3rd. John Norman, Pennwell Publishers Chapter 1 continued.
Week 3	Pre-Fire Planning	<i>Fire Officers Handbook of Tactics</i> ,, 3rd. John Norman, Pennwell Publishers Chapter 2.
Week 4	Size-Up	<i>Fire Officers Handbook of Tactics</i> ,, 3rd. John Norman, Pennwell Publishers Chapter 3 & 4
Week 5	Engine Company Operations Topic Selection for short Paper	<i>Fire Officers Handbook of Tactics</i> ,, 3rd. John Norman, Pennwell Publishers Chapters 5 & 6,
Week 6	Ladder Company	<i>Fire Officers Handbook of Tactics</i> ,, 3rd.

	Operations Test Chapters 1 thru 4	John Norman, Pennwell Publishers Chapter 7.
Week 7	Forcible Entry	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 8.
Week 8	Ventilation	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 9
Week 9	Basic Divisions of Tactics	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapters 12 & 13
Week 10	Search & Rescue	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 10
Week 11	Exposures Test Chapters 5 thru 8	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapters 16 & 18
Week 12	Confinement	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 14 & 15
Week 13	Fire Fighter Safety & Survival	<i>Fire Officers Handbook of Tactics</i> , 3rd. John Norman, Pennwell Publishers Chapter 11
Week 14	Salvage	Handouts and supplemental readings
Week 15	Emergency Operations Scenario Paper Due	Scenarios reviewed, no reading assigned.
Week 16	Cumulative Final Exam.	

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