



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

LAST REVIEW: 2008 - 2009 **NEXT REVIEW:** 2013 – 2014 **STATUS:** A

COURSE TITLE: Fire Prevention: Theory and Application

COMMON COURSE NUMBER: FFP 1505

CREDIT HOURS: 3

CONTACT HOUR BREAKDOWN

(per 16 week term)

CLOCK HOURS:

(Voc. Course ONLY)

Lecture: **48**

Lab:

Clinic:

Other:

PREREQUISITE(S): NONE

COREQUISITE(S): NONE

PRE/COREQUISITE(S):

COURSE DESCRIPTION *(750 characters, maximum):*

Fundamentals of fire prevention are introduced with examination of fire causes and effects. The function of fire prevention bureaus, enabling legislation regulations and standards are discussed. Additional areas of study include the inspection process, fire code enforcement, local decisions, fire investigations, records and reports.

General Education Requirements – Associate of Arts Degree (AA), meets Area(s): Area
General Education Requirements – Associate in Science Degree (AS), meets Area(s): Area
General Education Requirements – Associate in Applied Science Degree (AAS), meets Area(s): Area

UNIT TITLES

1. History of Fire Prevention
2. Fire Causes and Effects
3. Laws, Regulations, and Standards
4. The Building, Contents, and Related Hazards
5. Automatic Fire Sprinklers and Other Fire Protection and Alarm Systems
6. Inspection and Enforcement
7. Fire Investigation
8. Records and Data, Public Education, and Legislative Action



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ASSESSMENT:

Please provide a brief description (250 characters maximum) that details how students will be assessed on the course outcomes.

1. Quizzes, Test, and/or Final Exam (cumulative/comprehensive);
2. Selected faculty may assess homework, projects, class participation/attendance, and/or extra credit projects.

*** Complete the following only if course is seeking general education status ***

GENERAL EDUCATION Competencies and Skills *:

Please highlight in green font all Competencies/Skills from the list below that apply to this course. In the box to the right of the Competency/Skill, enter all specific learning outcome numbers (i.e. 1.1, 2.7, 5.12) that apply.

1. Read with critical comprehension	
2. Speak and listen effectively	
3. Speak and listen effectively	
4. Think creatively, logically, critically, and reflectively (analyze, synthesize, apply, and evaluate)	
Demonstrate and apply literacy in its various forms: (highlight in green ALL that apply) (1. technological, 2. informational, 3. mathematical, 4. scientific, 5. cultural, 6. historical, 7. aesthetic and/or 8. environmental)	
6. Apply problem solving techniques to real-world experiences	
7. Apply methods of scientific inquiry	
8. Demonstrate an understanding of the physical and biological environment and how it is impacted by human beings	
9. Demonstrate an understanding of and appreciation for human diversities and commonalities	
10. Collaborate with others to achieve common goals.	
11. Research, synthesize and produce original work	
12. Practice ethical behavior	
13. Demonstrate self-direction and self motivation	
14. Assume responsibility for and understand the impact of personal behaviors on self and society	
15. Contribute to the welfare of the community	

* General Education Competencies and Skills endorsed by '05-'06 General Education Task Force



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UNITS

Unit 1 Historical Background of Fire Prevention

General Outcome:

- 1.0 The students should be able to discuss the historical background of early fire prevention efforts.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 1.1 Cite early fire protection and prevention efforts.
- 1.2 Present an overview of American fire prevention efforts.
- 1.3 Show historical trends relating to fire prevention and protection.
- 1.4 Relate recent progress of fire prevention legislation and its significance for fire prevention efforts of the future.



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Unit 2 Fire Causes and Effects

General Outcome:

- 2.0 The students should be able to explain how and why fires occur and list their effects.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 2.1 Define and describe fire.
- 2.2 Identify the basic cause of fires.
- 2.3 Identify the effects of fire on buildings and on people.
- 2.4 Discuss the importance of fire prevention.



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Unit 3 Laws, Regulations, and Standards

General Outcome:

- 3.0 The students should be able to discuss the need for minimum standards and the legal authority necessary for enforcement of these standards.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 3.1 Explain governmental division of authority relating to fire regulations.
- 3.2 Outline the main points of the various codes relating to enforcement, scope, and content.
- 3.3 Identify the differences between a law and a standard.
- 3.4 Explain the use of standards as they apply to fire prevention.
- 3.5 Identify the impact of local regulation, such as fire zones, on the fire problem.
- 3.6 List the functions assigned to the fire department by the fire code.



Unit 4 The Building, Contents, and Related Hazards

General Outcome:

- 4.0 The students should be able to explain the purpose of building and fire codes in relation to structural and fire safety.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 4.1 Identify the main structural components of building construction and relate them to fire safety.
- 4.2 Identify how building codes are used to determine construction requirements.
- 4.3 Identify the main points of plan-checking of new construction by the fire prevention officer.
- 4.4 Identify some of the common defects encountered during the inspecting of existing construction.
- 4.5 Recognize examples of common and special hazards and explain why they are hazards.
- 4.6 Identify the steps necessary for the identification of hazards.
- 4.7 Discuss basic inspection procedures.



Unit 5 Sprinklers and Other Fire Protection Equipment

General Outcome:

- 5.0 The students should be able to explain the operation and use of automatic sprinklers and other extinguishing and detection systems.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 5.1 Identify the components of an automatic sprinkler system and explain their functions.
- 5.2 Differentiate between the types of sprinkler systems and their applications.
- 5.3 List the basic steps in plan checking and approval of a system installation.
- 5.4 Discuss basic design factors.
- 5.5 Identify the components of automatic and manual fire protection systems and explain their functions.
- 5.6 List the steps for checking each type of system for code conformance.



Unit 6 Inspection and Enforcement

General Outcome:

- 6.0 The students should be able to explain the procedures for making inspections and enforcing violations.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 6.1 List the objectives of a fire prevention inspection.
- 6.2 Discuss the basic steps in conducting an inspection.
- 6.3 Explain the components of a written inspection report.
- 6.4 Discuss the need for personal safety precautions in making inspections.
- 6.5 Identify the legal responsibilities of both citizens and fire prevention officers in code compliance.
- 6.6 Define "tunnel vision."
- 6.7 Cite steps taken for possible legal action.
- 6.8 Describe the aid used to enforce code requirements.



Unit 7 Fire Inspection

General Outcome:

- 7.0 The students should be able to gather the facts that guide a fire prevention program and help define the local fire problem and its causes.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 7.1 Discuss the basic steps for the investigation of fires and explain their importance.
- 7.2 Explain the requirements for an arson investigation and the prosecution of the arsonist.
- 7.3 Identify the basic tools useful to the fire investigation and explain how they can be used for informative and legal action.
- 7.4 Discuss why and how to protect evidence.
- 7.5 Explain the requirements for proving a case of arson.



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Unit 8 Records, Data, Public Education, and Legislative Action

General Outcome:

- 8.0 The students should be able to discuss the importance of records, reports, public education, and legislative action to a fire prevention program.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 8.1 Explain how fire prevention records and reports can be used as an activity report.
- 8.2 Cite methods for getting the public involved in fire prevention.
- 8.3 Discuss the steps necessary for local adoption of a fire code.
- 8.4 Explain in detail some of the kinds of records on which fire department statistics are based.
- 8.5 Describe methods used in fire prevention education programs with limited manpower.