

**Glendale Community College  
Fire Science Technology Program  
FSC 106 and FSC 113 Course Syllabuses**

**FSC 106**

**Course Number:** FSC 106  
**Course Title:** Introduction to Fire Protection  
**Term:** Fall 2010  
**Class Location** GCC Main Campus, Room PSS 151  
**Meeting Days/ Time:** Tuesday and Thursday  
1:30pm to 4:30pm  
**Instructor Team** Gregg Lentz, Captain/EMT  
[glentz@glendaleaz.com](mailto:glentz@glendaleaz.com)  
James Ellstrom, Captain/CEP  
[jellstrom@glendaleaz.com](mailto:jellstrom@glendaleaz.com)  
**Office:** TPS 103 by appointment only  
**Office Phone:** (623) 845-3830

**Official Course Description**

This class is designed to teach the history and evaluation of the fire department organization; role of the fire service in the community. Responsibilities of the fire administrator includes organization, departmental functions, interdepartmental relationships, management of buildings and equipment; techniques of fire fighting. Also includes emergency medical services and fire prevention.

Prerequisites: None

**Required Materials**

Textbook: “Introduction to Fire Protection” 3rd edition, by Robert Klinoff, Thomson, DelMar Learning

**Requirements for Successful Completion**

**Students may not miss more than 2 class sessions throughout the semester and may not be tardy more than twice or the instructor may withdraw them.** Students are strongly encouraged to contact the instructor before withdrawing if unable to meet the requirements of this class. During the course there may be 2 classes held off campus for facility tours, these are mandatory classes and students must provide arrangements for their own transportation, location and dates TBA.

**Course Competencies**

1. Describe the role and functions of public and private fire protection organizations.
2. Describe the entrance requirements and career opportunities for fire fighters.
3. Describe career opportunities other than fire fighting that are available in the fire service.
4. Describe the various operating and support divisions necessary to manage a municipal fire department.

5. Describe major concerns in the fire service relating to apparatus, equipment, and fire facilities.
6. Diagram the fire triangle and tetrahedron of fire.
7. List the three types of fire fuels.
8. Identify available extinguishing agents and give examples of situations in which each is effective.
9. Explain the general considerations for developing fire fighting tactics and strategy.

**Course Schedule / Outline**

See daily schedule provided by the instructor

**Attendance Policy**

Students may attend either one of the two class sessions offered each week. Students are responsible to notify the instructor if they cannot attend their regular scheduled class session and may request to attend the other class session offered that same week, as each class will contain the same material. Exams are cumulative and comprehensive in content and **MAY NOT** be made up without prior permission from the instructor. Any student missing more than 2 class sessions in the overall semester is subject to being withdrawn by the instructor. The last day for withdrawal without the instructor signature is **02/29/08**.

**Tests and quizzes**

There will be five quizzes, each is worth 20 points and will be given at the beginning of the class period. There will be a written Mid-Term and Final Exam each worth 50 points. There also will be a Current Events take home assignment worth 100 points, this assignment will be explained at the beginning of class.

**Grading Scale**

There will not be any Extra Credit. Overall grading will be based on the following:

Homework Assignments	= 50 points
Vocabulary quizzes, 5 @ 20 points each	= 100 points
Current Events assignment,	= 100 points
Mid term written exam	= 50 points
Final written exam	= <u>50points</u>
	<b>350 total possible points</b>

- Grade of A: = 350 to 315 total points
- Grade of B: = 314 to 280 total points
- Grade of C: = 279 to 245 total points
- Grade of D: = 244 to 210 total points
- Grade of F: = 210 or below total points

**Parking**

Students **MAY NOT** park in the fire station parking lot at any time. Parking is available in the extreme Northeast GCC parking lot, a pathway to the classroom is provided.

**Audio/ Video Taping Policy**

Consult your instructor if you wish to tape any portion of the class.

**Disability Statement**

If you have a disability that may have some impact on your work in this class and for which you may require accommodations, you need to notify the Disability Services and Resources office, located in SPS 31. Their phone number is (623) 435-3080.

**Disclaimer Statement**

Course content may vary from this outline to meet the needs of this particular group.

**FSC113****Introduction to Fire Suppression****Spring 2010****Section # 23300****Instructor: Raul Muniz****Classroom PSS 151****Tuesday and Thursday****Course Dates : starts October 12, 2010 ends December 16, 2010****Phone: 623-845-4776****[raul.muniz@gmail.com](mailto:raul.muniz@gmail.com)****Office Hours- Monday and Wednesday 10:00a.m to 12:00p.m.****PSS 255****Course Description**

Overview of the characteristics and behavior of fire, fire hazard properties of ordinary materials, extinguishing agents, fire suppression organization and equipment, basic fire fighting tactics, and public relations as affected by fire suppression. Excellent preparation class for FSC102, Fire Academy. Prerequisites: None.

**Course Materials : Required Textbook:** Fundamentals of Fire Fighter Skills, Second Edition, Jones and Bartlett

## **MCCCD Official Course Competencies:**

### **FSC113 19986- Introduction to Fire Suppression 99999**

1. Define the major terms and components of fire chemistry. (I)
2. Identify flammable liquids and describe how they react under fire conditions. (I)
3. Describe the five types of structures as classified in the Uniform Building Code. (II)
4. Identify the seven types of occupancies, and describe the particular firefighting problems presented by each. (II)
5. Explain the functions of various types of fire apparatus and the equipment that each carries. (III)
6. Describe the main tactical considerations for structural fires. (IV)
7. Explain the decision-making process used on the fireground. (IV)
8. Describe the basic components of a coordinated fire attack in at least three types of structures. (IV)
9. Explain the relationship between effective fire suppression activities and positive public relations. (V)

## **MCCCD Official Course Outline:**

### **FSC113 19986- Introduction to Fire Suppression 99999**

#### **It is also expected that students will learn about and understand:**

- I. Chemistry of fire and flammable liquids
  - A. Tetrahedron of fire
  - B. Products of combustion
  - C. Methods of heat transfer
  - D. Classes of fire
  - E. Stages of burning

F. Flame spread

G. Flashover

H. Backdraft

I. Flammable liquids

1. Classifications

2. Flash point

3. Ignition temperature

4. Boiling point

5. Vapor density

6. Explosive limits

7. Specific gravity

II. Structural or building types

A. Uniform building code classifications

1. Type I

2. Type II

3. Type III

4. Type IV

5. Type V

B. Structural framework

1. Interior

2. Exterior

C. Building occupancies

1. Assembly

2. Educational
3. Institutional
4. Residential
5. Mercantile
6. Business
7. Industrial

### III. Fire suppression apparatus and equipment

#### A. Functions of engine companies

1. Types of apparatus
2. Tank and pump delivery systems
3. Hose and equipment

#### B. Functions of tankers

#### C. Functions of ladder companies

1. Types of apparatus
2. Needs assessment of community

#### D. Functions of other specialized apparatus

1. Quick attack vehicle
2. Brush truck
3. Utility vehicle
4. Command vehicles
5. Others

#### E. Hose lay practices

#### F. Fire stream practices

G. Ladder and other support practices

IV. Tactical procedures

A. Size-up

B. Tactical considerations

1. Rescue
2. Confinement
3. Extinguishment
4. Support operations
5. Overhaul

C. Decision making

1. Facts
2. Probabilities
3. Current situation
4. Safety
5. Plan of attack

D. Coordination of fire attack

1. Residential structures
2. Mobile homes
3. Commercial buildings
4. Others

E. Special hazards in firefighting

V. Public relations in fire suppression

A. Minimizing damage

- B. Driving to and from calls
- C. Public fire education
- D. Conduct of firefighting personnel

If a student is late greater than 4 times, he/she will receive no credit for class when they are late (excused or unexcused).

After a student's third absence (excused or unexcused), that student **will be dropped** from class. The instructor is not responsible for notifying students on their attendance record and a student may be dropped, based on attendance, with little or no warning from the instructor. At any time prior to or after class a student may ask the instructor about their attendance and/or grades.

Late work assignments will **not** be accepted unless I am notified prior to the start of class. Quizzes will be allowed to be made up if I am notified ahead of time. The quizzes must be made up within 2 weeks. Cell phone use is not allowed in class.

It is the responsibility of each student to read and abide by the information contained in this syllabus. Students are also required to abide by the rules and standards outlined in the college's catalog and student hand book.

Civility - students are expected to maintain a level of formality appropriate to an institution of higher learning and will observe polite behavior towards the instructor and other students.

**POINTS AVAILABLE:**

Attendance/Participation:	10
Quizzes	30 (6 quizzes/ 5 pts each)
Mid-term	30
<u>Final exam</u>	<u>30</u>
Total Grade	100

Final grades will be based on following total points:

90-100 = A\*

80-89 = B\*

70-79 = C\*

61-69 = D\*

≤60 = F

Students must participate in class to obtain the full participation points and must attain at least 70% to receive a C grade.

Audio taping will be allowed in class. In the event of a guest speaker, please ask the individual speaker if taping will be allowed.

Extra Credit- The student may submit an essay for extra credit with prior approval from the instructor.

Disability Statement:

If you have a disability that may have some impact on your work in this class and *for which you may require accommodations*, you need to notify the Disability Services and Resources office, located in SPS 31 on the GCC main campus. Their phone number is 623-845-3080.

\*Course content may vary from this syllabus to meet the needs of this particular group. In the event any changes occur to this syllabus the instructor will promptly notify all students.

Plagiarism and Cheating-it is expected that all students will do their own work as per the MCCCDC Academic Misconduct Policy and any violation of which will result in the penalties outlined within the Student Handbook.

**Disclaimer: Taking and successfully completing this course by no means guarantees you employment with any fire department or any other employer.**