

Bergen Community College  
Division of Business, Social Sciences & Public Services  
Department of Social Sciences

**Departmental Policy Syllabus**

**FIR 101 Introduction to Fire Protection**

Date of Most Recent Syllabus Revision: March 31,2009

Course Typically Offered: Fall  Spring  Summer  Every Semester

Other \_\_\_\_\_

Syllabus last reviewed by: BCC General Education Committee \_\_\_\_\_ Date: \_\_\_\_\_

(Most courses need review Ad Hoc Committee on Learning Assessment \_\_\_\_\_ Date: \_\_\_\_\_

by only one of the following) 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., FIR101-001]  
Meeting Times and Locations:

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

**Course Description**

**FIR 101 – Principles of Fire Protection** is an introduction to the field of fire science, and such, will provide an overview of fire protection, fire prevention, fire suppression and the scientific nature of fire. Students will learn the principles relevant to hazard control, structural design, fire detection, extinguishment, and limitation of loss.

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

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

1. Trace the Fire Service history and traditions from the beginning of the Fire Service to the present
2. Define the common terminology used in the Fire Service.
3. Define and explain career options within the Fire Service and related occupations.
4. Identify the importance of fire loss statistics and reporting systems.
5. Demonstrate an awareness of the overall fire problem in the United States.
6. Identify the roles and responsibilities of the various organizations with interests in the Fire Service.
7. Explain the types and functions of the various fire department facilities and apparatus.
8. Demonstrate a familiarity with the nature of fire as a chemical reaction and understand how to eliminate fire scientifically.
9. Define the stages of fire growth from incipient stage through flashover.
10. Explain the rationale supporting the National Incident Command Standards.

**Means of Assessment:**

Instructors will distribute grading rubrics for all written assignments.

1. Students will be able to define the concepts and basic nomenclature utilized in the fire service, and will be able to describe the nexus between the evolution of the fire service, and community growth and development. 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 and support their own views substance on the nature of the fire problem in the United States. Students will demonstrate their knowledge of fire protection systems in their community 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 learn about the operation of public and private organizations responsible for combating fire, and the apparatus and equipment utilized in fire suppression.. 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 education and training required for careers in the fire service, and the various positions in fire organizations. Students will demonstrate their knowledge by developing a personal professional growth plan.

**Course Content**

1. As a general introduction to the field of fire science, students will be introduced to concepts and applications of fire theory and practice.
2. This course serves as a foundation to other fire science courses.
3. Various aspects of the fire service profession are explored, including; career opportunities, the need for profession development and academic education, and the multiplicity of tasks required by the fire service to meet demands of the public for protection and to satisfy the mandates of government.
4. The course will focus on operational principles relevant to hazard control, structural design, limitation of loss, fire detection, and fire extinguishment.

Topic headings in this course.

Chapter 1 - Fire Education and the Firefighter Selection Process  
Chapter 2 - Fire Protection Career Opportunities  
Chapter 3 - Public Fire Protection  
Chapter 4 - Chemistry and Physics of Fire  
Chapter 5 – Public and Private Support Organizations  
Chapter 6 – Fire Department Resources  
Chapter 7 – Fire Department Administration  
Chapter 8 – Support Functions  
Chapter 9 - Training  
Chapter 10 – Fire Prevention  
Chapter 11 – Codes and Ordinances  
Chapter 12 – Fire Protection Systems and Equipment  
Chapter 13 – Emergency Incident Management  
Chapter 14 – Emergency Operations

### **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:

*Introduction to Fire Protection*, 3ed. Robert Klinoff, Delmar Publishers  
**ISBN 13:** 9781418001773

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

All students in the Fire Protection 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 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.

## Other College, Divisional, and/or Departmental Policy Statements

Students are expected to review 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

<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</b> <b>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

## Course Outline and Calendar

UNIT #	TOPIC	ASSIGNMENT
Week 1	Fire Technology Education	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers, Chapter 1.
Week 2	The Firefighter Selection Process	Chapter 1 continued.
Week 3	Fire Protection Career Opportunities	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers, Chapter 2.
Week 4	Public Fire Protection	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers Chapter 3.
Week 5	Chemistry and the Physics of Fire Topic Selection for short Paper	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers, Chapter 4.
Week 6	Public and Private Support Organizations Test Chapters 1 thru 4	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers Chapter 5.
Week 7	Fire Department Resources	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers Chapter 6.
Week 8	Fire Department Administration	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers Chapter 7.
Week 9	Support Functions	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers Chapter 8
Week 10	Training	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers Chapter 9.
Week 11	Fire Prevention	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers Chapter 10.
Week 12	Codes and Ordinances Test Chapters 5 thru 10	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers Chapter 11.
Week 13	Fire Protection Systems	<i>Introduction to Fire Protection</i> , 3ed.

	and Equipment	Robert Klinoff, Delmar Publishers Chapter 12.
Week 14	Emergency Incident Management	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers Chapter 13
Week 15	Emergency Operations Short Paper Due	<i>Introduction to Fire Protection</i> , 3ed. Robert Klinoff, Delmar Publishers Chapter 14
Week 16	Cumulative Final Exa,	

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