



COURSE OUTLINE FALL 2008

<u>FIR 101</u>	<u>Introduction to Fire Science</u>
Course Number	Course Title
<u>3</u>	<u>3 Lecture Hours</u>
Credits	Hours: lecture/laboratory/other (specify)

Catalog description:

History and philosophy of fire protection and prevention, involves a survey of equipment, tactics, building construction, extinguishing agents, hazardous materials, and fire department organization.

Prerequisites: None

Corequisites: None

Is course New or Modified? No

Required texts/other materials:

Introduction to Fire Protection, Robert Klinoff, Delmar Learning
-and/or-
Fire Service Orientation and Terminology, IFSTA, Fire Service Publications

Last revised: n/a

Course coordinator: Scott Loh, 799-3245 (Dempster Center), lohs@mccc.edu

Information resources:

U.S. Fire Administration

- Publications: http://www.usfa.fema.gov/applications/publications/pubs_main.cfm See All Categories
- Applied Research: <http://www.usfa.fema.gov/dhtml/inside-usfa/research.cfm>
- Research Reports: http://www.usfa.fema.gov/dhtml/inside-usfa/r_reports.cfm
- Technical Reports: <http://www.usfa.fema.gov/applications/publications/techreps.cfm>
- Topical Fire Research Series: <http://www.usfa.fema.gov/dhtml/inside-usfa/tfrs.cfm>
- Learning Resource Center: <http://www.usfa.fema.gov/dhtml/inside-usfa/lrc.cfm>

National Institute for Standards and Technology

<http://www.fire.nist.gov>: Fire Tests/Data, Software/Models, Publications, FIREDOC (under Publications)

References

Strategic and Tactical Considerations on the Fire Ground (and Instructor's Guide); James Smith, Brady-Prentice Hall

Strategic and Tactical Considerations on the Fire Ground Study Guide; James Smith, Trafford Press
Fire Protection Handbook, NFPA (CD ROM available)
Firefighters Handbook, Delmar Learning

Other learning resources:

FEMA Learning Resource Center: <http://www.lrc.fema.gov>

Current Events/News

<http://www.firehouse.com>

<http://www.fireengineering.com>

<http://www.withthecommand.com>

<http://www.firefighterclosecalls.com>

Society of Fire Protection Engineers: <http://www.pentoncmg.com/sfpe/index.html>

Course goals:

The student will be able to:

- Identify career opportunities in fire protection and related fields.
- Relate philosophy and history of fire protection/service to modern day.
- Understand the organization and function of public and private fire protection services; fire departments as part of local government.
- Identify laws and regulations affecting the fire service and fire service nomenclature.
- Understand basic fire chemistry and physics.
- Under stand the basic function and types of fire protection systems.
- Understand the need for fire strategy and tactics.

Course-specific General Education Core Competencies and Goals.

General Education Knowledge Goals

Social Science. Students will use theories and concepts to understand human behavior as well as social and political institutions. Students will gain an appreciation of the impact that responsible fire protection has on society.

History. Students will understand historical events and the significance that these events played in the development of modern fire protection.

Ethical Reasoning and Action. Students will understand ethical issues and situations as related to fire safety and fire protection.

MCCC Core Skills

Information Literacy. Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work and continuing into the fire protection industry.

Collaboration and cooperation. Students will develop the interpersonal skills required for effective performance in group situations through required course work.

Units of study in detail.

- I. Describe and discuss the components of the history and philosophy of the modern day fire service.

- II. Analyze the basic components of fire as a chemical reaction, the major phases of fire, and examine the main factors that influence fire spread and fire behavior.
- III. Differentiate between fire service training and education; fire protection certificate program and a fire service degree program; and explain the value of education in the fire service.
- IV. List and describe the major organizations that provide emergency response service and illustrate how they interrelate.
- V. Identify fire protection and emergency-service careers in both the public and in the private sector.
- VI. Synthesize the role of national, state and local support organizations in fire protection and emergency services.
- VII. Discuss and describe the scope, purpose, and organizational structure of fire and emergency services.
- VIII. Describe the common types of fire and emergency services facilities, equipment, and apparatus.
- IX. Compare and contrast effective management concepts for various emergency situations.
- X. Identify and explain the components of fire prevention including code enforcement, public information, and public and private fire protection systems.

Evaluation of student learning: Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor. Periodic tests or quizzes as well as a final exam may be utilized. Other methods such as a research or group projects are encouraged.

Academic Integrity Statement: Mercer County Community College and the Fire Science program are committed to Academic Integrity -- the honest, fair and continuing pursuit of knowledge, free from fraud or deception. This implies that students are expected to be responsible for their own work and that faculty and academic support services staff members will take reasonable precautions to prevent the opportunity for academic dishonesty. The Fire Science program affirms its support of the Academic Integrity Policy as printed in the Student handbook and approved by the College Board of Trustees March 18, 2004.