



MERCER
COUNTY COMMUNITY COLLEGE

COURSE OUTLINE

Course Number	Course Title	Credits
FIR 209	Fire Prevention & Code Enforcement 2	3
Hours: 3 Lecture Lecture/Lab/Other	Co- or Pre-requisite: FIR 110, Fire & Code Enforcement 1	Implementation Semester & Year January 2022

Catalog description:

Focus on fire code administration, principles of personnel management, details on record management and maintenance of files, fire code variances, fire code penalties and enforcement procedures. Provides an understanding of the legal aspects, duties of the fire official, and coordination with other governmental agencies.

General Education Category:
Not GenEd

Choose an item.

Course coordinator: James McCann, (609) 799-3245 or
mccannj@mccc.edu

Required texts & Other materials:

New Jersey Uniform Fire Code Manual (available through the NJ Division of Fire Safety, call 609-633-6031)

IFSTA, Fire Inspection & Code Enforcement, 8th edition

Course Student Learning Outcomes (SLO):

Upon successful completion of this course the student will be able to:

1. Effectively understand the principles and practices of fire code enforcement and the Fire Official. (ILG 10), (PLO 1, 6)
2. Administrate, interpret and enforce, fire prevention measures under the New Jersey Uniform Fire code. (ILG 9, 10, 11), (PLO 1, 2, 3, 4, 5, 6, 7)
3. Describe the role code enforcement plays in government and the interface between government agencies. (ILG 10), (PLO 1, 6)
4. Understand the role of building construction plans and there review for fire safety compliance. (ILG 2, 3, 4, 10, 11) (PLO 1, 2, 6)
5. Describe the legal aspects and ramifications of code enforcement. (ILG 9, 10, 11), (PLO 1, 4, 5, 6)
6. Describe the role of Fire Official in fire investigation. (ILG 1, 2, 3, 4, 9, 10, 11), (PLO 1, 2, 6)
7. Describe the role of the Fire Official's in personnel supervision of fire inspectors and administrative staff. (ILG 1, 2, 3, 4, 9, 10, 11), (PLO 1, 7)
8. Define the fire inspection and code enforcement process from start to end. (ILG 1, 2, 3, 4, 9, 10, 11), (PLO 1, 4, 5, 6)
9. Describe the role of fire and code enforcement in both safety for the public and firefighters. (ILG 1, 2, 3, 4, 9, 10, 11), (PLO 3, 6, 7)

Course-specific Institutional Learning Goals (ILG):

Institutional Learning Goal 1. Written and Oral Communication in English. Students will communicate effectively in both speech and writing.

Institutional Learning Goal 2. Mathematics. Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.

Institutional Learning Goal 3. Science. Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.

Institutional Learning Goal 4. Technology. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

Institutional Learning Goal 9. Ethical Reasoning and Action. Students will understand ethical, issues, and situations.

Institutional Learning Goal 10. 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.

Institutional Learning Goal 11. Critical Thinking: Students will use critical thinking skills understand, analyze, or apply information or solve problems.

Program Learning Outcomes for (PLO)

1. Discuss the history, support organizations, resources, incident management, training, and emergency operations and relate how each plays a role within the fire service.
2. Define and use basic terms and concepts associated with the chemistry and dynamics of fire.
3. Apply principles of hydraulics, building construction, strategy, and tactics to fire ground operations.
4. Communicate the relationship of fire prevention and fire inspection.
5. Demonstrate the importance of public education in relation to fire prevention.
6. Evaluate facilities to appraise code compliance and potential hazards, building construction issues, and presence of appropriate fire protection systems to help ensure life safety both pre-incident and during an incident.
7. Employ safe work practices using recognized standards and regulations.

Units of study in detail – Unit Student Learning Outcomes:

- I. ***Introduction (Supports SLO 1, 2)***
 - A. Understand and use N.J.A.C. 5:18A, Subchapters 1-4
 - B. Understand the Fire Official's duties

- II. ***Administration of the Local Enforcing Agency (LEA) (Supports SLO 1, 2)***
 - A. Recognize establishing agencies per N.J.A.C. 5:18A and 5:18
 - B. Understand the jurisdiction and relationship with the NJ Division of Fire Safety
 - C. Describe local ordinance preparation, presentation and adoption
 - D. Explain the registration process for life hazard uses
 - E. Describe the collection of fees

- III. ***Interfacing with Local Government (Supports SLO 3)***
 - A. Describe an overview of the Uniform Construction Code, coordination with the construction official
 - B. Explain interfacing with state level agencies such as DFS, DCA, DOL, DEP, DYFS
 - C. Explain interfacing with local level agencies such as Fire Districts, Planning, Zoning, Police, Health, Finance and Engineering departments

- IV. ***Building Construction and Plan Reviews (Supports SLO 4)***
 - A. List the types of construction, BOCA Basic Building Code, Chapter 6
 - B. Explain height and area limitations, BOCA Basic Building Code, Chapter 5
 - C. Understand fire resistance ratings
 - D. Explain methods of fire resistance ratings, BOCA Basic Building Code, Chapter 7
 - E. Describe continuity of ratings
 - F. Describe truss construction concepts
 - G. Understand types of loads
 - H. Understand load carrying design of beams and columns
 - I. Recognize deficiencies in construction
 - J. Understand Types of Plans: site plans, ploy plans, architectural plans, mechanical plans, foundation plans, floor plans, electrical plans, views (plan, elevation, sectional, detail), sprinkler system plans

- V. ***Legal Aspects of Code Enforcement (Supports SLO 5)***
 - A. Describe the legal aspects of fire prevention
 - B. Understand the N.J.S.A. Uniform Fire Safety Act Statutes
 - C. Understand the Uniform Fire Code (UFC) 5:71, 5:72
 - D. Demonstrate code interpretation
 - E. Explain granting and processing variances
 - F. Understand penalties
 - G. Describe serving of notice
 - H. Explain appeals and preparation for an appeal
 - I. Recognize conflicts of interest

- VI. ***Public Education & Juvenile Fire Setter Programs (Supports SLO 9)***
 - A. Discuss basic fire safety skills programs
 - B. Discuss public fire safety education programs
 - C. Understand public relations
 - D. Understand dealing with the press
 - E. Explain the New Jersey juvenile fire setter program

- VII. ***Fire Investigation (Supports SLO 6)***
 - A. Discuss an overview of investigation process
 - B. Describe working with other investigative agencies

- VIII. ***Personnel Management and Supervision (Supports SLO 7)***
 - A. Differentiate between supervising Fire Inspectors and Administrative staff.

- IX. ***Municipal Government (Supports SLO 3)***
 - A. Describe the role municipal government and their organization and function
 - B. Explain municipal departments and agencies
 - C. Understand budgeting for NJ Municipalities and Fire Districts

- X. ***Inspections Overview (Supports SLO 8)***
 - A. Describe ethics and demeanor
 - B. Explain Pre-inspection preparation
 - C. Explain right of entry and methods
 - D. Understand interviewing
 - E. Use documentation methods
 - F. Explain on-site records review
 - G. Describe sampling and testing

- XI. ***Board of Appeals (Supports SLO 8)***
 - A. Discuss preparing for a Board of Appeals Hearing

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 papers or group projects are encouraged.