FIR 209                                      Fire Prevention and Code Enforcement II
Course Number                                    Course Title

3                                           3 Lecture Hours
Credits                                           Hours: lecture/laboratory/other (specify)

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.

Prerequisites: FIR 107 Fire Prevention and Code Enforcement I Corequisites: None

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, 6th edition

Last revised: Fall 2019

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

Information resources:
- NFPA Automatic Sprinkler Handbook, National Fire Protection Association
- NFPA Flammable Combustible Liquids Code Handbook
- BOCA Basic/National Building Code
- BOCA National Mechanical Code
- NFPA Codes and Standards Referenced
- IFSTA Public Fire Education
- IFSTA Fire Code Enforcement and Inspection Manual
- NFPA National Electrical Code (NEC)

Other learning resources:
- New Jersey Division of Fire Safety Website, www.state.nj.us/dfs
- Information handouts and technical bulletins provided by the Instructor

Course goals:
The student will be able to:

- Successfully pass the New Jersey State Fire Official certification examination.
- Effectively understand the principles and practices of fire code enforcement.
- Administrate, interpret and enforce fire prevention measures under the New Jersey Uniform Fire Code.

Course-specific General Education Knowledge Goals and Core Skills.

**General Education Knowledge Goals**

- **Communication.** Students will communicate effectively in both speech and writing.
- **Social Science.** Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.
- **History.** Students will understand historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.
- **Ethical Reasoning and Action.** Students will understand ethical issues and situations.

**MCCC Core Skills**

- **Written and Oral Communication in English.** Students will communicate effectively in speech and writing, and demonstrate proficiency in reading.
- **Critical Thinking and Problem-solving.** Students will use critical thinking and problem solving skills in analyzing information.
- **Ethical Decision-Making.** Students will recognize, analyze and assess ethical issues and situations.
- **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.
- **Collaboration and Cooperation.** Students will develop the interpersonal skills required for effective performance in group situations.

Units of study in detail.

I. **Introduction**

A. N.J.A.C. 5:18A, Subchapters 1-4
B. Overview of the Fire Official's duties

II. **Administration of the Local Enforcing Agency (LEA)**

A. Establishing agencies per N.J.A.C. 5:18A and 5:18
B. Jurisdiction and relationship with the NJ Division of Fire Safety
C. Local ordinance preparation, presentation and adoption
D. Registration process for life hazard uses
E. Collection of fees

III. **Interfacing with Local Government**

A. Overview of the Uniform Construction Code, coordination with the construction official
B. Interfacing with state level agencies such as DFS, DCA, DOL, DEP, DYFS
C. Interfacing with local level agencies such as Fire Districts, Planning, Zoning, Police, Health, Finance and Engineering departments

IV. **Building Construction and Plan Reviews**

A. Types of construction, BOCA Basic Building Code, Chapter 6
B. Height and area limitations, BOCA Basic Building Code, Chapter 5
C. Fire resistance ratings
D. Methods of fire resistance ratings, BOCA Basic Building Code, Chapter 7
E. Continuity of ratings
F. Truss construction concepts
G. Types of loads
H. Load carrying design of beams and columns
I. Recognizing deficiencies in construction
J. 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
A. Legal aspects of fire prevention
B. N.J.S.A. Uniform Fire Safety Act Statutes
C. Uniform Fire Code (UFC) 5:71, 5:72
D. Code interpretation
E. Granting and processing variances
F. Penalties
G. Serving of notice
H. Appeals and preparation for an appeal
I. Conflicts of interest

VI. Public Education & Juvenile Firesetter Programs
A. Basic fire safety skills programs
B. Public fire safety education programs
C. Public relations
D. Dealing with the press
E. New Jersey juvenile firesetter program

VII. Fire Investigation
A. Overview of investigation process
B. Working with other investigative agencies

VIII. Personnel Management and Supervision

IX. Municipal Government
A. Organization and function
B. Departments and agencies
C. Budgeting for NJ Municipalities and Fire Districts

X. Inspections Overview
A. Ethics and demeanor
B. Pre-inspection preparation
C. Right of entry and methods
D. Interviewing
E. Documentation methods
F. On-site records review
G. Sampling and testing

XI. Board of Appeals
A. 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 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.