COURSE OUTLINE
Fire Prevention

Course Description
FS 135. Fire Prevention. 3 hours credit. This course will enable the student to identify and comprehend fundamental knowledge relating to the field of fire prevention. The student will learn about the history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; fire and life safety education; and fire investigation.

Required Materials
For complete material(s) information, refer to: https://bookstore.butlercc.edu

Butler-assessed Outcomes
The intention is for the student to be able to:
1. Identify laws, codes, ordinances, and regulations as they relate to fire prevention.
2. Explain code enforcement as it impacts life and property loss.

Learning Units
1. Define the national fire problem and role of fire prevention.
2. Identify and describe fire prevention organizations and associations.
3. Define laws, rules, regulations, and codes and identify those relevant to fire prevention of the authority having jurisdiction.
4. Define the functions of a fire prevention bureau.
5. Describe inspection practices and procedures.
7. List opportunities in professional development for fire prevention personnel.
8. Describe the history and philosophy of fire prevention.

Learning PACT Skills that will be developed and documented in this course
Through involvement in this course, the student will develop ability in the following PACT skill area(s):

Analytical Thinking Skills
- Critical thinking - Through review of case laws and fire prevention models, the student will apply the relevant principles and concepts to the development of fire prevention programs.

Major Summative Assessment Task(s)
These learning outcome(s) and the Learning PACT skill(s) will be demonstrated by:
1. Completing a research project pertaining to fire prevention.
Skills or Competencies
Actions that are essential to achieve the course outcomes: (The following skills and competencies are taken from the National Fire Protection Association Standards and the Fire and Emergency Services Higher Education Model and incorporated into each specific course.)

A. General knowledge
   1. Identify the national fire problem and the main issues related thereto
   2. Recognize the need, responsibility, and importance of fire prevention as part of an overall mix of protection
   3. Recognize the need, responsibility, and importance of fire prevention organizations
   4. Identify the minimum professional qualifications at the state and national level for Fire Inspector and Public Educator
   5. Define the elements of a plan review program
   6. Identify the laws, rules, codes and other regulations relevant to fire protection of the authority having jurisdiction
   7. Organize training programs for fire prevention
   8. Design media programs
   9. Identify the major programs for public education
   10. Describe and comprehend the components of the history and philosophy of the modern day fire science
   11. Analyze the basic components of fire as a chemical reaction, major phases of fire, examine the main factors that influence fire spread and fire behavior
   12. Differentiate between fire service training and education; fire protection certification program and a fire service degree program and explain the value of education in the fire service
   13. List and identify the major organizations that provide emergency response service and describe how they interrelate
   14. Identify fire protection and emergency-service careers in both the public and in the private sector
   15. Synthesize the role of national, state, and local support organization in fire protection and emergency services
   16. Discuss and describe the scope, purpose and organizational structure of the fire service
   17. Describe the common type of fire and emergency services facilities, equipment, and apparatus
   18. Compare and contrast effective management concepts for various emergency situations
   19. Identify and explain the components of fire prevention including code enforcement, public information, and public and private fire protection systems

Learning Units
I. History and philosophy of fire prevention
   A. Historical background
   B. Early fire prevention measures
C. Historic tragic fire events
D. Fire safety improvements
E. Variables in philosophy

II. Fire safety improvements in the United States
   A. Education
   B. Engineering
   C. Enforcement

III. Public and life safety education programs
    A. Scope of practice
    B. Residential fire safety
    C. Fire prevention through civic organizations

IV. Enforcement and compliance of fire safety codes
    A. Plan-review programs
    B. Substance control
    C. Structural control measures
    D. Control of ignition sources
    E. Control of occupancy
    F. Legal aspect of fire code enforcement
    G. Condemnation of unsafe structures
    H. Special occupancy considerations

V. Fire safety inspections and procedures
    A. Preparation considerations
    B. Inspection tour
    C. Exit interview
    D. Inspection report
    E. Procedures to enforce compliance
    F. Classifications of hazards
    G. Hazards in various types of occupancies
    H. Legal and moral responsibilities of the inspector
    I. Conflicts with other agencies

VI. Preparation of fire service personnel for prevention duties
    A. Training
    B. National professional qualifications

VII. Municipal fire prevention organizations
    A. Responsibilities
    B. Functions
    C. Fire prevention bureaus
    D. Sources of conflict
    E. Advisory committees
    F. Program goals
G. State responsibilities

VIII. Instilling a positive fire reaction
  A. Reporting procedures
  B. Fire drills
  C. Use of extinguishers
  D. Private fire brigades
  E. Fire safety manuals

IX. Fire prevention in the private sector
  A. Organizations with primary fire prevention functions
  B. Organizations with allied interest in fire prevention
  C. Risk management

X. Fire prevention in the public sector
  A. Department of Defense
  B. Department of Justice
  C. Department of Interior
  D. Department of Agriculture
  E. Department of Commerce
  F. Department of Labor
  G. Health and Human Resources
  H. Department of Transportation
  I. Department of Homeland Security
  J. Independent U.S. government agencies
  K. County agencies
  L. Municipal governments

XI. Fire prevention through arson suppression
  A. The crime of arson
  B. Model arson laws
  C. Motives for arson
  D. Arson and civil unrest
  E. Arson arrest
  F. Arson control needs

XII. International practices in fire prevention
  A. Fire death statistics
  B. Causes of fires
  C. Comparison of fire prevention education and enforcement
  D. Canadian fire safety procedures

XIII. Fire prevention research
  A. U.S. Forest Service fire prevention
  B. High-risk area
  C. NIST research
D. International research

XIII. Proof that fire prevention works
   A. Annual reports
   B. Documentation
      1. Fire safety activities
      2. Death and injuries
      3. Loss statistics
   C. National fire incident reporting system

Learning Activities
Activities will include, but not be limited to, class discussions, lectures, classroom exercises, course projects, and field trips.

Grade Determination
The student will be evaluated through written exams, skill proficiency assessment, and other methods of evaluation as deemed necessary by the instructor.