

SYLLABUS FOR FIRT 1307

Fire Prevention Codes & Inspections

Semester Hours Credit: 3

Lecture Hours: 48

Course Dates/Days/Times:

Instructor:

Office Hours:

Instructor Email:

Phone:

I. INSTRUCTOR BIOGRAPHY

Mr. Wynn has been employed in full-time fire service in both Departmental (KCFD – Firefighter and Engineer) and Industrial (Hughes Helicopters – Fire Captain) operations; he has hands-on experience fighting all seven types of fire, structural & vehicular rescue, emergency medical responses & training, as well as working on various types of apparatus operations [foam trailer, wildland rough terrain vehicles], Fire Prevention Inspections, sprinkler and fire suppression systems (operation & design), training at all levels, and leadership. I have an AA in Fire Science and instructional experience in various settings. Mr. Wynn has been providing Fire Technology instruction at Central Texas College-Europe for several years.

COURSE DESCRIPTION: This course is a study of the preparation of firefighters and fire officers to develop public fire safety awareness. Emphasis on implementation of fire and public safety programs in an effort to reduce the loss of life.

LEARNING OUTCOMES: Upon successful completion of this course the student will:

- Recognize fire prevention fire safety education and code enforcement as a major responsibility of today's fire service.
- Outline the master planning concept and the administrative responsibilities of public and private sectors in the fire safety field.
- Identify the elements of fire protection, fire loss reduction, and measures people should take in reaction to a fire.

INSTRUCTIONAL MATERIALS:

- A. The instructional materials identified for this course are viewable through www.ctcd.edu/books

<i>Introduction to Fire Prevention</i>	Robertson, James	8th	Prentice Hall	2015	0133843270 9780133843279
--	------------------	-----	---------------	------	---

II. COURSE REQUIREMENTS:

- A. Your first responsibility is scholarship. The grade you receive for this course will not be the grade of the instructor, but rather the grade you and you alone make.
- B. You should attend class regularly and be prepared to participate in classroom discussions and to take unannounced quizzes relating to text assignments and lecture material presented from the beginning of the course. Please refer to 'Class Attendance and Course Progress' under the Academic Policies section in our current CTC Course Catalog.
- C. You are encouraged to give your best effort throughout the semester. From the beginning, you should plan for a steady, organized, and continuous effort, which in the long run will prove more effective for your final grade than a last minute crash-cram policy. Your course grade is not determined solely by exam grade. Such factors as class participation, initiative, attendance, and individual research papers or projects will be considered in grade computation.
- D. From time to time, special library and/or outside assignments will be made to members of the class individually and/or in groups. You are expected to read all assignments and fulfill your responsibilities to any group assignment.
- E. You are expected to read all assigned material and bring your textbook/reading materials to class. Keep informed on all assignments, especially after an absence.
- F. Good class notes are indispensable for earning a good grade, since both the material assigned and that discussed in class will be the basis for examination material.
- G. Scholastic Honesty: All students are required and expected to maintain the highest standards of scholastic honesty in the preparation of all coursework and during examinations. The following are considered examples of scholastic dishonesty:
- Plagiarism: The taking of passages from the writing of others without giving proper credit to the sources.
- Collusion: Using another's work as one's own, or working together with another person in the preparation of work, unless such joint preparation is specifically approved in advance by the instructor.
- Cheating: Giving or receiving information on examinations.
- H. Special Work: A term paper or other project, per requirements of the instructor, will be required. The subject must be appropriate for the course material. Check with the

instructor when you have made a selection. The value is indicated in the semester grade computation and has considerable weight on your final average.

III. EXAMINATIONS:

A. There will be a minimum of two major examinations and a written paper or project as follows:

1. Mid-term exam on August 1st, 2015
2. Final exam on August 29th, 2015
3. Paper or Project due on August 22nd, 2015

Examinations will consist of both objective (true/false, multiple choice, fill in-the-blank, and matching) and subjective (short answer and essay) questions. Students must be able to communicate both orally and in written form, thus some questions requiring the composition and writing of an essay answer will be required.

IV. SEMESTER GRADE COMPUTATIONS:

EXAM	POINTS	POINTS	GRADES
Discussion Board	100	900-1000	A=4 pts/sem hr
Mid-Term Exam	250	800- 899	B=3 pts/sem hr
Final exam	350	700- 799	C=2 pts/sem hr
Paper/Project	200	600- 699	D=1 pt/sem hr
Participation	100	0- 599	F=0 pts/sem hr

TOTAL	1000		

V. NOTES AND ADDITIONAL INSTRUCTIONS FROM THE COURSE INSTRUCTOR:

- A. **Tuition refunds** are made only in the case of class cancellation or official and timely withdrawal from CTC or from a course. Please refer to the current course catalog.
- B. **GoArmyEd** students should contact their education counselor before withdrawing and are required to withdraw through the GoArmyEd portal.

Please note: a military withdrawal does not override CTC’s grading policy.

For **self-pay students**, refunds are computed from the date the Application for Withdrawal or Refund is filed with the CTC Field Representative or designated Student Services Officer. Special conditions apply to students who receive federal, state, and/or institutional financial aid.

Tuition and fees paid directly to the Institution by the Veterans Administration, Title IV (Financial Aid Programs, a sponsor, donor, or scholarship shall be refunded to the source rather than directly to the students.

- C. **Course Withdrawals, Student Responsibilities:** It is the student’s responsibility to officially withdraw from a course. The instructor cannot initiate a withdrawal based upon a student’s request. Rather, students must initiate the withdrawal with the designated Education Center Representative, through the CTC Field Representative or the Student Services Officer for that region.

Applications for Withdrawal will be accepted at any time before the completion of 75% of the course, after which time the student will be assigned an “FN”- “Failure for Non-attendance.”

- D. **Incomplete / Course in Progress Grade Policy:** An “IP” or “Incomplete” grade may be assigned by an instructor if a student has made satisfactory progress in a course with the exception of a major quiz, final exam, or other project. The “IP” grade may also be assigned based on circumstances beyond a student’s control, such as personal illness, death in the immediate family, or military orders. Notice of absences, with supporting documentation, may be required by the instructor. The instructor makes the final decision concerning the granting of the incomplete grade. With an “Incomplete” grade, students are required to complete a set amount of work before the instructor will submit an official letter grade. This date can be determined by the instructor but must be within 45 days of the course end date. After completion of the work the instructor can then change the grade of “IP” to the appropriate letter grade. If this work is not completed by the specified date the instructor will change the grade to “F”.
- E. **Cellular phones, beepers, and other electronic devices** will be turned off while the student is in the classroom or laboratory unless the student is using the device for class purposes. No texting or social networking is allowed during class.
- F. **Instructor Discretion:** The instructor reserves the right of final decision in all matters.
- G. **Civility:** Individuals are expected to be cognizant of what a constructive educational experience is and respectful of those participating in a learning environment. Failure to do so can result in disciplinary action up to and including expulsion.

VI. COURSE OUTLINE:

- A. **Unit One:** Introduction to the course and Chapter 1: History and Philosophy of Fire Prevention
 - 1. Unit Objectives: Upon successful completion of this unit, the student will be able to:
 - a. Identify tragedies that have led to regulations in specific types of occupancies.
 - b. Identify contributing factors leading to fires of historical impact.
 - c. List five contributing factors to loss of life in fires.
 - d. Identify ways that arsonists have been punished in the past.
 - e. Describe ways that early governments managed the fire risk of commonly found fuel.
 - f. Identify early fire prevention measures and make the connection to modern fire prevention practices in some cases.
 - g. Identify the major classifications of occupancies.
 - 2. Learning Activities:
 - a. Classroom lecture/discussion
 - b. Reading assignments: Chapter 1, pages 1-20
 - c. Audio-visual aids: Instructors preference

3. Unit Outline: refer to Contents, textbook page iii.

B. Unit Two: July 11th, 2015, 13:30-16:30. Chapter 2: Status of Education, Engineering, and Enforcement in the United States.

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Identify the basic concepts and definitions of education, enforcement, and engineering and how each relates to fire prevention.
- b. Describe how the local jurisdiction applies code to new and existing occupancies and how it is enforced.
- c. Describe the relation between performance-based codes and performance-based designs.
- d. Explain the concept of Community Risk Reduction.
- e. List the five interventions associated with Community Risk Reduction.

2. Learning Activities:

- a. Classroom lecture/discussion
- b. Student homework/study
- c. Reading assignment: Chapter 2, pages 22-41

3. Unit Outline: refer to Contents, textbook page iii.

C. Unit Three: Chapter 3: Public Fire and Life Safety Education Programs.

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Identify the steps in public fire education planning.
- b. Identify the partnerships between civic organizations and fire service professionals, and how the message of fire prevention is disseminated by these partnerships.
- c. Identify methods to measure the effectiveness of fire and life safety education in our schools.

2. Learning Activities:

- a. Classroom lecture/discussion
- b. Student homework/study
- c. Reading assignment: Chapter 3, pages 42-62

3. Unit Outline: refer to Contents, textbook page iv.

D. Unit Four: Chapter 4: Enforcing Fire Safety Compliance.

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Describe the legal authority for code enforcement.

- b. Describe the importance of plan review and its relation to code enforcement.
 - c. Identify how control of sales and use assists in fire code enforcement, and give some examples.
 - d. Recognize how structural control is used as a means of code enforcement, and give specific examples of structural control.
 - e. Identify how control of occupancy is used as a means of code enforcement, and give an example of controlling occupancy.
 - f. Describe compliance and abatement procedures and why assurance of compliance is preferred over court action.
 - g. List some fire safety considerations in specific special types of occupancies.
2. Learning Activities:
- a. Classroom lecture/discussion
 - b. Student homework/study
 - c. Reading assignment: Chapter 4, pages 63-84
3. Unit Outline: refer to Contents, textbook page iv.

E. **Units Five:** Chapter 5: Fire Safety Inspection Procedures.

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:
- a. Identify the components of a thorough inspection.
 - b. Identify the frequency of occupancy inspections.
 - c. Understand the right of entry and which pertinent case law applies to entry.
 - d. Recognize who should accompany the inspector on an occupancy inspection.
 - e. List how the inspector should conduct the inspection of the occupancy.
 - f. Discuss the importance of the exit interview.
 - g. Identify the legal and moral responsibilities of the inspector.
 - h. Recognize the importance of the re-inspection.
 - i. List some hazards specific to types of occupancies.
 - j. List three common types of possible conflicting agency inspections.
2. Learning Activities:
- a. Classroom lecture/discussion
 - b. Reading assignments: Chapter 5, pages 85-108
 - c. Audio-visual aids: Instructors preference
3. Unit Outline: refer to Contents, textbook page iv.

F. **Unit Six:** Chapter 6: Preparing Fire Service Personnel for Fire Prevention Duties

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Explain the lack of emphasis on fire prevention in the United States.
- b. List the four reasonably expected components of a fire protection master plan.
- c. Explain the benefits of fire prevention training for all fire service personnel.
- d. Discuss the importance of prefire planning.
- e. Describe the importance of having properly trained fire inspectors.
- f. Identify the educational needs of fire inspectors.
- g. Summarize the relationship between the fire service and the National Professional Qualifications System.
- h. Identify pertinent professional standards as applied to fire inspectors.
- i. List the components of a comprehensive review of a community's fire problem.

2. Learning Activities

- a. Classroom lecture/discussion
- b. Reading assignment: Chapter 6, pages 109-124
- c. Audio-visual aids: Instructor's preference

3. Unit Outline: refer to Contents, textbook page iv.

G. **Unit Seven**: Chapter 7: Organization and Administration of Municipal Fire Prevention Units.

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Identify the primary components of a fire prevention program.
- b. Recognize the local government's responsibility with respect to fire prevention.
- c. Explain the role of the fire prevention bureau within the fire service and the community.
- d. Describe generalists and specialists in fire prevention and where they are likely to be encountered.
- e. List potential sources of conflict between fire prevention and fire suppression personnel and how an advisory committee resolves such conflicts.
- f. Explain an intensive inspection program as is recognized in Cincinnati.
- g. Understand the relationship between a fire prevention entity and other municipal agencies.

2. Learning Activities:

- a. Classroom lecture/discussion
- b. Reading assignments: Chapter 7, 125-148
- c. Audio-visual aids: Instructors preference

3. Unit Outline: refer to Contents, textbook page v

H. **Unit Eight:** .Review & Mid-Term Examination.

1. Review and discuss Chapters 1-7 in preparation of Mid-Term Examination.
2. Administer Mid-Term Examination; grade exam and discussion.

I. **Unit Nine:** Chapter 8: Instilling Positive Fire Reaction

1. **Unit Objectives:** Upon successful completion of this unit, the student will be able to:
 - a. Explain the importance of fire reporting as it relates to fire prevention.
 - b. Identify what the emphasis on home fire drills should be.
 - c. Explain the difference in focus of institutional fire drills as compared with those in occupancies where residents are ambulatory.
 - d. Explain the careful application of fire extinguisher use in certain occupancies.
 - e. List some of the building safety devices or concepts that can lead to successful evacuations of a structure during a fire.
 - f. List some behaviors researchers have discovered often demonstrated by people during fires.
 - g. Identify fire reaction in specific occupancies including high-rises, special occupancies, and housing for older adults.
2. **Learning Activities:**
 - a. Classroom lecture/discussion
 - b. Reading assignments: Chapter 8, 149-168
 - c. Audio-visual aids: Instructors preference
3. **Unit Outline:** refer to Contents, textbook page v.

J. **Unit Ten:** Chapter 9: Fire Prevention Efforts of the Private Sector

1. **Unit Objectives:** Upon successful completion of this unit, the student will be able to:
 - a. Describe the primary role of the National Fire Protection Association.
 - b. List some organizations with primary fire prevention functions.
 - c. List some organizations with an allied interest in fire prevention.
 - d. Describe the relationship between fire prevention and the insurance industry.
 - e. Explain the role of the Insurance Services Office as it relates to the fire service.
2. **Learning Activities:**
 - a. Classroom lecture/discussion
 - b. Reading assignments: Chapter 9, pages 169-183
 - c. Audio-visual aids: Instructors preference

3. Unit Outline: refer to Contents, textbook page vi.

K. **Unit Eleven**: Chapter 10: Fire Prevention Responsibilities of the Public Sector

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a Identify federal resources that may be called to assist at the local level.
- b Describe the role of the Bureau of Alcohol, Tobacco, Firearms and Explosives in fire investigation.
- c Compare the role of the federal government in fire prevention in the United States with its counterparts in other countries.
- d Identify which federal agency has had the greatest impact on fire prevention.

2. Learning Activities:

- a Classroom lecture/discussion
- b Reading assignments: Chapter 10, pages 184-206
- c Audio-visual aids: Instructors preference

3. Unit Outline: refer to Contents, textbook page vi.

K. **Unit Twelve**: Chapter 11: Fire Prevention through Arson Suppression

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a Demonstrate an understanding of the characteristics of fire and the need for a thorough fire investigation.
- b List the most commonly accepted motives for arson.
- c Explain the model arson law, and identify and explain the four degrees of arson, and describe how the model arson law relates to the modern state penal code.
- d Explain the importance of preserving evidence and the potential conflicts that may arise between fire suppression efforts and fire investigators.
- e Explain the delicate relationship between fire investigation and the media.
- f Explain how the following court cases relate to fire investigation:
 1. *Michigan vs. Tyler*
 2. *Michigan vs. Clifford*
 3. *Daubert vs. Merrell Dow Pharmaceuticals, Inc.*
 4. *The State of South Dakota vs. Jorgenson*
- g List some of the conclusions of NFPA's Arson Control Symposium with regard to arson control needs.

2. Learning Activities:

- a Classroom lecture/discussion

- b. Reading assignments: Chapter 11, 207-232
- c. Audio-visual aids: Instructors preference

3. Unit Outline: refer to Contents, textbook page vii.

L. **Unit Thirteen**: Chapter 12: Fire Prevention Research

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Define the term *research*.
- b. Identify the variables that affect fire statistics.
- c. Identify the audiences to which the Vision 20/20 project plans to direct its marketing.
- d. Explain the significance of code enforcement research conducted by the Urban Institute, NFPA, and the U.S. Fire Administration.

2. Learning Activities:

- a. Classroom lecture/discussion
- b. Reading assignments: Chapter 12, pages 226-242
- c. Audio-visual aids: Instructors preference

3. Unit Outline: refer to Contents, textbook page xv.

M. **Unit Fourteen**: Chapter 13: Providing Fire Prevention Works

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Describe the importance of validating the effectiveness of fire prevention.
- b. List the evidence presented that supports the effectiveness of residential fire sprinklers.
- c. Explain how data can be used in annual reports, blogs, Facebook, Twitter, and other community venues to market positive fire prevention services.
- d. Describe how fire data are collected and compiled in the National Fire Incident Reporting System.
- e. Describe how one out of the three examples (residential fire sprinklers, changes in mattress flammability, and testing of cigarettes) can reduce the impact of unwanted fires in the United States.
- f. Explain how the U.S. Congress was involved in reduction of fires caused by smoking materials.

2. Learning Activities:

- a. Classroom lecture/discussion
- b. Reading assignments: Chapter 13, pages 255-274

- c. Audio-visual aids: Instructors preference
 - 3. Unit Outline: refer to Contents, textbook page vii.
- N. **Unit Fifteen**: Present Term Paper and prepare for final examination.
- 1. Unit Objectives: Upon successful completion of this unit, the student will be able to:
 - a. Review all materials in textbook and notes and present questions and problems into the forum and to the instructor.
 - b. Turn in Term Paper.
 - 2. Learning Activities:
 - a. Classroom lecture/discussion
 - b. Reading assignments: Review Textbook
 - c. Audio-visual aids: Instructors preference
 - 3. Unit Outline: refer to Contents, textbook page xvi.
- O. **Unit Sixteen**:
- 1. Review for final examination
 - 2. Administer Final examination; grade examination & discuss, and issue final grades.