Safety Management Fall 2018

SAFM 534 – Fire Safety Management

Instructor: Xinjian (Kevin) He, Ph.D.

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Time: 4:00-6:30pm, Tuesday Classroom: MRB – Room 105

Office Hours: 10:00-11:30am, 2:00-3:30pm, Tuesday

Textbook:

Fire Inspection and Code Enforcement- 7th Edition (2009), ISBN: 9780879393489, Publisher- Fire Protection Publications, Oklahoma State University

References:

Fire Protection Handbook (Vol 1 & 2), 20th Edition, National Fire Protection Association (NFPA) 2015 Life Safety Code (NFPA 101) - Read only (Free on-line), NFPA.org 2015 Fire Code (NFPA 1) - Read only (Free on-line), NFPA.org

Syllabus

Course Description: A 3-hour required course with a detailed analysis of fire services, usually provided under safety manager jurisdiction, with special attention to legal compliance, organizational structure, services rendered, training needs, and management techniques.

Course Format: This course was designed for a classroom based schedule to include: lectures, case studies, code based scenarios, article review, exams, and a final project. Free on-line fire code references will also be used to complete individual projects. The Fall 2018 delivery will include the required traditional course goals, objectives, and assessments in the form of a mid-term and final exam. Students should expect to spend extended time completing the required readings, individual research topics, and other provided information. Successful completion of this course will prepare the student for all required course tracks (comprehensive, thesis, etc.). This is a required graduate course that is more demanding and time consuming compared to an elective course. Please approach the course with that in mind.

Course Schedule:

Date	Lecture	Class Topics	
8/21	Lecture 1	Course Overview; Fire Safety Organizations and Codes/Standards	
8/28	Lecture 2	Fire Behavior, Physics and Chemistry of Fire	
9/4	Lecture 3	Fire Behavior, Physics and Chemistry of Fire cont.	
9/11	Lecture 4	Building Construction, Occupancy Classifications	
9/18	Field Trip	TBD.	
9/25	Lecture 5	Means of Egress	
10/2		Midterm Exam	
10/9	Lecture 6	Fire Detection and Alarm Systems	
10/16	Field Trip	Filed Trip to WVU Mine Safety Training Center	
10/23	Lecture 7	Fire Suppression and Control Systems	
10/30	Lecture 8	Guest Lecture.	
11/6	Lecture 9	Fire Modeling, Fire Risk Analysis	
11/13	Lecture 10	Control of Hazardous Materials, Transportation Fire Safety	
11/20		No Class. Thanksgiving Recess.	
11/27		Review, Group Presentations	
12/4		Final Exam. (Project Report Due)	

Grade Allocation

Total:	100%
Final Exam:	40%
Group Project Report:	15%
Midterm Exam:	40%
Attendance/ Homework:	5%

Grade Scale:
$$90 - 100 \% = A$$

 $80 - 89 \% = B$
 $70 - 79 \% = C$
 $60 - 69 \% = D$
 $< 60 \% = F$

Course Objectives: To assure upon completion of the course, the student will be able to analyze a comprehensive fire service program, usually provided under safety management jurisdiction, with special attention to legal compliance, organizational structure, services rendered, training needs and management techniques.

- 1. Explain and apply fire safety codes, regulations, and standards in fire prevention and control. Describe characteristics and behavior of fire
- 2. Identify and review basic building construction types and features
- 3. Evaluate effectiveness of fire prevention, detection, control and emergency systems.
- 4. Identify and control hazardous materials related to fire safety program
- 5. Evaluation of fire prevention and inspection programs
- 6. Conduct fire prevention and abatement programs

Assessments to Course Objectives:

- 1. Analyze standards for fire prevention and protection through various textbooks and code editions
- 2. Testing of core subjects through questions
- 3. Individual projects based on knowledge of the legal bases, techniques, and codes promulgated by NFPA
- 4. Analyze information gathered from scientific literature reviews
- 5. Virtual or actual site inspections of hazardous conditions.
- 6. Midterm Examination
- 7. Individual or group management report submission in professional format
- 8. Case study submissions reports
- 9. Individual presentation/Group presentation
- 10. Final examination.

Academic Integrity Statement

The integrity of the classes offered by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. Therefore, instructors will enforce rigorous standards of academic integrity in all aspects and assignments of their courses. For the detailed policy of West Virginia University regarding the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions, please see the West Virginia University Academic Standards Policy (http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification). Should you have any questions about possibly improper research citations or references, or any other activity that may be interpreted as an attempt at academic dishonesty, please see your instructor before the assignment is due to discuss the matter.

Academic Standards Policy, including Academic Dishonesty

The WVU Catalog contains the full Academic Standards Policy.

Resources for Faculty and Students for Reporting and Appealing Violations of Academic Standards

Adverse Weather Statement

In the event of inclement or threatening weather, everyone should use his or her best judgment regarding travel to and from campus. Safety should be the main concern. If you cannot get to class because of adverse weather conditions, you should contact your instructor as soon as possible. Similarly, if your instructor(s) are unable to reach the class location, they will notify you of any cancellation or change as soon as possible, using agreed upon methods to prevent students from embarking on any unnecessary travel. If you cannot get to class because of weather conditions, instructors will make allowances relative to required attendance policies, as well as any scheduled tests, quizzes, or other assessments. [adopted 9-8-2014]

Attendance Policy

The WVU Catalog contains the full Attendance Policy.

Campus Safety Statement

The WVU Police are committed to creating and maintaining a safe learning environment for all students, faculty, and staff. Part of this mission includes educating the campus community on how to respond to potential campus threats, such as the threat of an active shooter on campus or other suspicious behaviors. Fortunately, WVU Police offer training - both online and in-person - on how to handle a variety of campus safety scenarios. All students are encouraged to visit the <u>WVU Police(https://police.wvu.edu/</u>) webpage, in particular the content under the Active Shooter(https://police.wvu.edu/training)) training program. Students are also encouraged to report any suspicious behaviors on campus using the Report a Threat (https://police.wvu.edu/emergency-management/threat-assessment)) portion of the webpage.

Additional materials on campus safety prepared by WVU Police, including special safety tips and training, will also be provided on our eCampus page. [adopted 10-2-17]

Inclusivity Statement

The West Virginia University community is committed to creating and fostering a positive learning and working environment based on open communication, mutual respect, and inclusion.

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in your classes, please advise your instructors and make appropriate arrangements with the Office of Accessibility Services. (https://accessibilityservices.wvu.edu/)

More information is available at the <u>Division of Diversity</u>, <u>Equity</u>, <u>and Inclusion</u> (https://diversity.wvu.edu/) as well. [adopted 2-11-2013]

Incomplete Policy

The WVU Catalog contains the full **Incomplete Policy**.

Sale of Course Material Statement

All course materials, including lectures, class notes, quizzes, exams, handouts, presentations, and other course materials provided to students for their courses are protected intellectual property. As such, the unauthorized purchase or sale of these materials may result in disciplinary sanctions under the <u>Student Conduct Code</u>. (https://studentconduct.wvu.edu/policies-and-procedures) [adopted 5-11-2015]

Sexual Misconduct Statement

West Virginia University does not tolerate sexual misconduct, including harassment, stalking, sexual assault, sexual exploitation, or relationship violence [BOG Rule 1.6]. It is important for you to know that there are resources available if you or someone you know needs assistance. You may speak to a member of university administration, faculty, or staff; keep in mind that they have an obligation to report the incident to the Title IX Coordinator. (https://titleix.wvu.edu/staff)

If you want to speak to someone who is permitted to keep your disclosure confidential, please seek assistance from the <u>Carruth Center</u>, 304-293-9355 or 304-293-4431 (24-hour hotline), and locally within the community at the <u>Rape and Domestic Violence Information Center</u> (RDVIC), 304-292-5100 or 304-292-4431 (24-hour hotline).

For students at WVU-Beckley, contact the <u>Women's Resource Center</u> at 304-255-1585 (toll free at 1-888-825-7836) or <u>REACH</u> at 304-340-3676. For students at WVU-Keyser, contact the WVU-Keyser<u>Psychological Services Office</u> at 304-788-6976, and locally in Keyser, the <u>Family Crisis Center</u>, 304-788-6061 or 1-800-698-1240 (24-hour hotline).

For more information, please consult <u>WVU's Title IX Office</u> (https://titleix.wvu.edu/confidential-resources).

Student Evaluation of Instruction Statement

Effective teaching is a primary mission of West Virginia University. Student evaluation of instruction provides the university and the instructor with feedback about your experiences in the course for review and course improvement. Your participation in the evaluation of course instruction is both strongly encouraged and highly valued. Results are strictly confidential, anonymous, and not available to the instructor until after final grades are released by Admissions and Records. Information about how you can complete this evaluation will provided by your instructor. [adopted 4-14-2008]