Safety Management
SAFM 534 – Fire Safety Management
Wednesday 4:00 – 6:50 PM; MRB – Room 105
Spring 2015

Instructor: Xinjian (Kevin) He, Ph.D.
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Office Hours: Wednesday 10:00-12:00pm and 2:00-3:30pm. Other hours by appointment.

Textbook:
  ISBN: 9780879393489, Publisher- Fire Protection Publications, Oklahoma State University
  ISBN: 9781482221220, Publisher- CRC Press
- 2015 Life Safety Code - Read only (Free on-line) NFPA.org
- 2015 Fire Code - 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, guest speakers, field visits, exams, and a final project. Two textbooks will be used in addition to the National Fire Protection Association (NFPA) National Fire Codes. Free on-line fire code references will also be used to complete individual projects. The Spring 2015 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. The class will decide if group projects will be modified to personal projects using a management submission format. Successful completion of this course will prepare the student for all required course tracts (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:

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Class Topics</th>
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| 1    | January 14 | Course Overview; Fire Safety Organizations and Codes/Standards<br>
Reading assignment: FICE (Chapter 1, 2) |
| 2    | January 21 | Fire Behavior and Chemistry<br>
Reading assignment: FICE (Chapter 3) |
| 3    | January 28 | Building Construction<br>
Reading assignment: FICE (Chapter 4, 5, 6) |
| 4    | February 4 | Building Construction cont.<br>
Reading assignment: FICE (Chapter 4, 5, 6) |
| 5    | February 11| Means of Egress<br>
Reading assignment: FICE (Chapter 7) |
| 6    | February 18| Fire Detection and Alarm Systems<br>
Reading assignment: FICE (Chapter 11) |
| 7    | February 25| **Midterm Exam**                                                             |
| 8    | March 4    | Fire Suppression and Control Systems<br>
Reading assignment: FICE (Chapter 8, 9, 10) |
| 9    | March 11   | Fire Suppression and Control Systems cont.<br>
Reading assignment: FICE (Chapter 8, 9, 10) |
| 10   | March 18   | Guest Speaker/Field Visit – Fire Detection, Suppression, and Control Systems<br>
Reading assignment: FICE (Chapter 16) |
| 11   | March 25   | **Spring Recess**                                                            |
| 12   | April 1    | Site Access and Fire Hazard Recognition<br>
Reading assignment: FICE (Chapter 12, 13) |
| 13   | April 8    | Fire Identification and Control of Hazardous Materials<br>
Reading assignment: FICE (Chapter 14, 15) |
| 14   | April 15   | Guest Speaker – Fire Inspection Program<br>
Reading assignment: FICE (Chapter 17) |
| 15   | April 22   | **Group Presentations. (Project Report Due Date)**                           |
| 16   | April 29   | **Final Exam. (Student Portfolio Due Date)**                                |
Grade Allocation

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Attendance/Performance</td>
<td>10%</td>
</tr>
<tr>
<td>Assignments/Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>30%</td>
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<tr>
<td>Project Report</td>
<td>20%</td>
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<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
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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 literature searches and assigned reading projects
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. Group presentation
10. Final examination.
**Academic Honesty**

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. 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 Student Conduct Code at http://studentlife.wvu.edu/office_of_student_conduct/student_conduct_code.

**Social Justice Statement**

West Virginia University is committed to social justice. I concur with that commitment and expect to maintain a positive learning environment based upon open communication, mutual respect, and non-discrimination. Our University does not discriminate on the basis of race, sex, age, disability, veterans status, religion, sexual orientation, color or national origin. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration.

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with the Office of Disability Services (304-293-6700).