



## *Fire Protection and Safety Engineering Technology Program*

541 Engineering North  
Stillwater, Oklahoma 74078-8016  
(405) 744-3237

---

**Course:** Fire Protection & Safety Projects I – FPST 4982  
**Semester:** Fall 2020  
**Lecture:** Advanced Technology Research Center 103 (ATRC 103), Fridays  
8:30 am-9:15 am  
**Lab:** None  
**Instructor:** Rob Agnew, Ph.D., CIH, CSP – Associate Professor  
**Contact:** [Rob.Agnew@okstate.edu](mailto:Rob.Agnew@okstate.edu)

### **Catalog Description:**

Two-semester project with team format. Team members work with sponsors and faculty who serve as mentors in fields related to their topics. Students complete topic selection, progress reports, final reports, and poster presentations.

**Prerequisites:** Junior standing and department permission.

### **Course Objectives:**

The student will participate with a team to complete a project in the fire protection, safety, occupational health, hazardous materials, or other loss control areas in this quasi-independent study course. Students are expected to conduct research and/or apply state-of-the-art technologies during the development and completion of the project. The instructor will provide general instruction on conducting research, writing a report and referencing. This course provides the atmosphere and opportunity for intensive individual investigation and study of loss control problems of interest to the student. State-of-the-art and developmental activities designed to demonstrate practical loss control applications in education, business, industry or government are required.

### **Learning Objectives**

Upon completion of this course the student will be able to apply the foundation of loss control knowledge obtained in prerequisite fire, safety and hygiene classes to the elimination of a workplace hazard, design of a fire protection, safety or industrial hygiene system or development of a loss control training or educational program.

### **Course Learning Outcomes:**

1. Ability to understand broad topics in the fire protection and safety fields.
2. Ability to take initiative, select a topic and conduct literature review or design and analysis.
3. Ability to balance the time among all other courses and finish a project with a written report in time.
4. Ability to confidently present the project in front of the class.

### **Optional Text:**

Practical Research 12<sup>th</sup> Ed. by Leedy ISBN: 9780134775654 Publisher: Prentice Hall  
(One copy per group should be sufficient)

### **COVID-19 Information**

Face coverings (masks) are required in class and in lab per OSU policy. Face shields (available at the lab) are required when working in small group lab activities where social distancing is not feasible. Failure to comply with this policy will result in dismissal from class/lab.

Seat assignments (seating chart) will be made on or before the first day of classes. Students are expected to sit in these seats for the entirety of the semester to aid in contact tracing. Be advised, the classroom only seats 10 students after social distancing protocols are enforced. Therefore, students will be assigned to attend in-person every other week with their teams to provide a status update. In alternate weeks, students will attend online.

Hybrid/Online – students need to be prepared to utilize the hybrid model (synchronous or asynchronous) should the university transition to online or should there be an exposure of a student, faculty, or employee and a quarantine be necessary. Students should have access to a web camera and microphone to join classes or lab activities. Synchronous learning will be done via Canvas Conferences or Zoom.

When logging into synchronous classes/labs, the following conditions must be followed:

- Individual cameras are required to be turned on, with the student's face clearly visible in the camera view
- Students should be fully clothed in the view of the camera.
- The background of the viewing area should be assessed and any inappropriate contents should be removed or covered.
- Do not attempt to operate a vehicle or other heavy machinery while logged in from a tablet or smart phone
- Do not log in from bed, restroom, or other inappropriate areas (as determined by the instructor).

### **Assignments:**

The student is responsible for all assigned work. Assignments are due at the on the date assigned by the instructor as reflected in the online dropbox in Canvas. Late work results in a zero for the assignment. However, all assignments must be turned in a suitably completed. Subsequent assignments will receive a score of zero if previous assignments have not been turned in and suitably completed.

### **Assignments and Conduct of the class:**

Incomplete or not turned in assignments will receive a score of zero. Email submissions will NOT be accepted. Assignments are due as indicated in Canvas or in the schedule. **Late assignments will not be accepted.**

This class will have an on-line component using Canvas. Provided in-class are instructions for using Canvas as requested by the students.

Turned in materials failing to follow the formatting instructions of the assignment will receive a grade of zero. Failure to place your name on the submitted file, so the name appears when printed, will result in a grade of zero.

Unless excused for valid (and unavoidable) university reasons, late work will receive a zero score. Turn in all work per the incomplete work criteria above. Travel for university functions is **not** an excuse for late work. Turn in assignments early or make alternative arrangements. Illness, death in the immediate family and other such emergencies are excusable under university policy. However, the student should contact the Fire Protection and Safety Engineering Technology Office as soon as possible (744-5721 -- this phone has voice mail.).

### **Office Hours: (subject to change)**

Office Hours are virtual only following OSU Covid-19 protocols.

I will also be generally available after class and during regular working hours. Make appointments via email. In any case, call to ensure I am in my office before making the trek since other duties may conflict. I will also respond to student questions by e-mail.

### **Attendance:**

Students are here studying for a profession therefore promptness is expected. Weekly class attendance is required.

### **Dress Code Requirements**

Professional Dress is expected for the final presentations. Failure to follow the dress code will result in a zero for the presentation.

### **Classroom Behavior:**

With respect to cell/smart phones, this is practice for a profession and professional conduct is expected. The student's conduct is expected to reflect being an adult and using technology in an appropriate manner e.g. participating in interactive surveys during class that use texting technology are appropriate; social media, playing games, chatting with friends, etc. are not appropriate. Phones, if on, should be placed on vibrate to allow for Code Red alerts.

The use of recording equipment, IPODS, MP3 players, cell phones, the taking of video or photography are NOT PERMITTED without the expressed written consent of the instructor.

Students who are disrupting class in any way (as defined by the instructor) will be asked to leave and it will be considered being absent from class. Unprofessional communication e.g. by email, will receive no response from the instructor.

Students will have the opportunity to partner with OSU-FPST Alumni for real-world industry related projects. It is expected that students will conduct themselves professionally in their behaviors and written and oral communications. Students should strive to represent the OSU-FPST program in the most positive light.

### **Communication:**

The student will utilize professional correspondence. Using “hey” to begin an e-mail, using colloquial expressions such as “is it cool if,” or failure to use a greeting, body (with complete sentences), and salutation is considered unprofessional and therefore will not be answered. The use of the niceties of polite society is strongly encouraged e.g. please and thank you.

### **Grading:**

Course grades will be determined by the overall scores in the table below. Specific grading rubrics will be provided as appropriate. Additionally, each student is required to keep a weekly log of their efforts (timesheet) which will be turned in fortnightly. Throughout the semester, you will receive “timecard audits” where you will be asked to produce the work you have claimed to have completed in your weekly log. Each team member will be asked to complete a survey regarding teammate participation. The results of the timesheets, the survey, and the observations of the faculty will be used to calculate an individual effort modifier, which will be used to adjust each individual’s score from the team score. For example, each team member is expected to complete ~25% of the overall work. If the team score is 80% and one individual delivered only 20% of the effort, they would score  $80 * (20/25) = 64\%$ . Conversely, the team member who picked up the slack and performed 30% of the effort would earn  $80 * (30/25) = 96\%$ . Finally, with the consent of the instructor, a team may vote a member out of the team if they fail to pull their weight. This will result in an F for the course.

**Individual effort modifier.** Each student's point total will be multiplied by an effort modifier. This modifier is based upon the fortnightly progress reports given in class and the fortnightly written progress reports given in the alternating fortnightly period. Each report will be consolidated by the team leader who is elected by the team. Additionally, a survey of participation will be completed by each group member evaluating the contribution of each member.

The material in this course is essential professional material and a high level of competency is expected. Weighted equally in the grading of material are both quality of presentation and technical content. **Since this course is a capstone for a degree from the College of Engineering Architecture and Technology, your project is expected to contain both sound engineering judgement and include relevant engineering calculations.**

## Fire Protection & Safety Projects I - FPST 4982

	4982 Key Deliverables	Points	Percentage	Grader	Date
1	Team & Project Selection	-		-	8/21/2020
2	Define your problem	25	2.5%	Course Instructor	8/28/2020
3	Literature Review (Lit Tracker)	75	7.5%	Course Instructor	9/11/2020
4					
5	Content Outline	125	12.5%	Course Instructor	9/25/2020
6					
7	Abstract & Design Review	125	12.5%	Course Instructor	10/2/2020
8	Draft 1	150	15.0%	Course Instructor	10/16/2020
9					
10	Safety Plan/Budget/Gantt Chart	50	5.0%	Full FPST Faculty	10/23/2020
11	Peer Review	50	5.0%	Course Instructor	1/7/1900
12	Draft 2	200	20.0%	Project Adviser	10/30/2020
13	Final Project Proposal (Written & Presentation)	200	20.0%	Full FPST Faculty	11/6/2020
14	Proposal Modification after Committee Review	i		Project Adviser	11/20/2020
15	Proposal Approval or Rejection	Pass/Fail		Full FPST Faculty	
16	Attend CEAT Sr. Design Expo	i		Course Instructor	
17	Final Draft & Material acquisition	50		Project Adviser	12/4/2020
	Total	1000	Total is multiplied by an individual effort modifier assess by the 15 weekly progress reports and team member		

### Final Grade Scale

A = 90% and above

B = 80% to 89.9%

C = 70% to 79.9%

D = 60% to 69.9%

F = 59.9% and below

F! = Cheating

### Project Report & Presentation

Additional details will be provided for each portion of the project.

### Academic Misconduct:

Copying the work of another for personal credit is **plagiarism** whether the work is a published work or the unpublished work of another student. Thoroughly reference all use of materials developed by others using APA 6<sup>th</sup> edition formatting. Use of electronic files that are the work of others is plagiarism. Complete all assignments individually unless specifically assigned as group work. While students may discuss assignments with each other, individual completion of the work is required. Plagiarism and work-sharing violations, as well as dishonesty on examinations, may result in reduction in grade, no credit, failure in the course, or an F! Per university policy.

**Having or hiring another person [to] write original content for you is flagrant plagiarism and will result in a recommendation for suspension from the**

**university. If non-original work is suspected, the student will be asked to perform an oral defense of the work in front of a panel consisting of the instructor of record, the student's senior project adviser (if different), an academic integrity facilitator, and another independent faculty member if necessary to form an odd-numbered panel.**

The minimum penalty for acts of academic dishonesty in this course is a grade of zero on the writing assignment or examination in question. Penalties may be much more severe, however, and could include an "F!" for the entire course and a recommendation of additional disciplinary actions. University regulations regarding academic misconduct are applicable per <http://academicintegrity.okstate.edu/>.

Academic dishonesty includes both giving and taking of improper assistance on writing assignments or examinations as well as any other form of attempting to gain credit for work that is not that of the student.

### **Laptop Computers**

Per the University Catalog, page 111:

"For students in Engineering, Architecture, and Technology, the **college requires** that all students have several basic tools. Students in the College must have a scientific calculator and **a laptop computer**. The scientific calculator should be capable of computing trigonometric functions, logarithmic and natural logarithmic functions, basic statistical analysis, and all algebraic functions. The laptop requirements are published on the college IT website <http://ceat-its.okstate.edu/>."

Students are required to bring a laptop, with a fully charged battery, to lecture unless otherwise informed by the instructor.

### **Special Accommodations for Students**

If any member of this class feels that he/she has a disability and needs special accommodations of any nature whatsoever, the instructor will work with the student and the office of Disabled Student Services, 326 Student Union, to provide reasonable accommodations to ensure the student has a fair opportunity to perform this class. Please advise the instructor of such disability and the desired accommodations at some point immediately after the first scheduled class period.

### **Reminders**

See the University Syllabus Attachment uploaded to D2L

Complete and return FPST Emergency contact forms to the instructor or the department Admin.

### **Reminders**

Course receipts are due on Friday 9/4

Distinguish Seminar Series is Wednesday 10/21 at 7pm (Zoom Conference) – Dr. John Frucci, Director of OSU's Center for Fire & Explosives, Forensic Investigations, Training & Research (CENFEX) and 9/11 first responder

See the University Syllabus Attachment in Canvas

### **FPST Student ListServ**

All current FPST students should be signed up on the FPST Student ListServ. Directions are attached below, please read them carefully, and send your request as directed. Being on the ListServ is important, as it is the main means of contact that the program has with the entire FPST student population for notifications from the faculty and student organizations. You must send your request from your OSU email account, request from other accounts are declined to avoid spam.

**Please announce**  
**LISTSERV SIGN-UP DIRECTIONS**

To subscribe to the School of Fire Protection and Safety Technology listserv, send an email message to [listserv@listserv.okstate.edu](mailto:listserv@listserv.okstate.edu) with "subscribe OSU-SFPS Your Name" in the body of the message, without the quotation marks.

Example: This is an example of the email, if your name is George Smith.

<input type="button" value="Send"/>	<input type="button" value="Delete"/>
<hr/>	
To:	<input type="text" value="listserv@listserv.okstate.edu"/>
Cc:	<input type="text"/>
Bcc:	<input type="text"/>
Subject:	<input type="text"/>
<hr/>	
<div style="border: 1px solid black; padding: 5px;">Subscribe OSU-SFPS George Smith</div>	

### **Job Information**

Job positions that are open to FPST students and alumni are now posted on the HireOSUGrads website only and are no longer sent out on the ListServ first. All students seeking internships, part-time, or full-time employment for the FPST degree should go to [www.hireosugrads.com](http://www.hireosugrads.com) and create an account. All students take the time now to create their accounts so you are well prepared. (Note: Be sure to review your account and update as needed before applying for a listing.) Andrea Haken, Career Specialist, can assist you if you should need help with this available employment tool.

**Andrea Haken**  
Career Specialist

College of Engineering,  
Architecture and Technology  
102 Engineering North  
Stillwater, OK 74078  
Phone: (405) 744-7574  
Fax: (405) 744-6066  
[andrea.haken@okstate.edu](mailto:andrea.haken@okstate.edu)  
<http://studentservices.okstate.edu>

