American Public University System

The Ultimate Advantage is an Educated Mind

School of Public Safety and Health FSMT340 Incendiary Fire Analysis and Investigation 3 Credit Hours 8 Weeks Prerequisite(s): None

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Instructor Information

Instructor:

Email:

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Course Description (Catalog)

The following class, Incendiary Fire Analysis and Investigation examines technical, investigative, legal, and managerial approaches to the arson problem, including principles of incendiary fire analysis and detection, environmental and psychological factors of arson, gang-related arson, legal considerations and trial preparations, managing the fire investigation unit, intervention and mitigation strategies, and shaping the future.

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Course Scope

The scope of *Incendiary Fire Analysis and Investigation*, FSMT340, is to meet the levels of mastery established by the National Fire Academy, NFPA 921 and NFPA 1033. These standards are agreed upon by professionals across the fire service community as the foundational benchmarks that all individuals

should know at the completion of this course. By the end of this course you will be able to discuss and have a thorough knowledge of the learning objectives listed in the next session.

Class, I am unable to provide you with copies of NFPA 921 and NFPA 1033 but you can view the full codes online for free. Our textbook has information on these codes but I know some of you would like to see the full version. Please know that you will only be tested on the information found in our textbook and that accessing the full codes online is not mandatory.

If you would like to see the full version of the codes, you will need to click on the following link.

http://www.nfpa.org/aboutthecodes/list_of_codes_and_standards.asp

Once you click on the code you are looking for, it will take you to that codes page where you will then scroll down the page.

- For the NFPA 921 code you will scroll down until you see a link that says "View the 2011 edition online".
- For the NFPA 1033 code you will scroll down until you see a link that says "View 2009 edition online".

When you click that link, it will take you to a login page where you can set up your free NFPA account.

Once you set up your account, you will have full access to the codes. They are "Read Only" and cannot be printed but having free access to them is an excellent tool for everyone.

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Course Objectives

Course Objectives: Please see the Course Outline below for the weeks that correspond with these course objectives:

- CO-1: Illustrate the core concepts of fire investigations
- CO-2: Differentiate between the various products of combustion
- **CO-3:** Evaluate the effectiveness of today's fire investigations
- CO-4: Distinguish between the different types of fires and how they are investigated
- CO-5: Relate hazardous material emergencies to fire investigations
- **CO-6:** Determine the causes of fire related deaths and injuries
- CO-7: Examine the science of fire investigation analysis

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Course Delivery Method

This course delivered via distance learning will enable students to complete academic work in a flexible manner, completely online. Course materials and access to an online learning management system will be made available to each student. Online assignments are due by 11:55 PM (EST) on Sunday of the week as noted and include Forum questions (accomplished in groups through a threaded forum), and individual assignments submitted for review by the Faculty Member). Assigned faculty will support the students throughout this eight-week course.

Note: If you are in a different time zone, please make sure that you plan ahead to fulfill course requirements. You may get locked out of tests and guizzes if late!

(Note to Students: The course materials, assignments, learning outcomes, and expectations in this upper level undergraduate course assume that the student has completed all lower level general education and career planning coursework necessary to develop research, writing, and critical thinking skills. Students who have not fulfilled all general education requirements through courses or awarded transfer credit should strongly consider completing these requirements prior to registering for this course.)

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Course Resources

Required Course Textbook: (The following book is an E-book) All test questions will come from this book.

DeHaan, J.D and Icove, D.J. (2012). *Kirk's Fire Investigation (7Th Edition)*. Pearson Publishers:

Upper Saddle River, NJ.

ISBN: 978-0-13-508263-8

The following two classroom tabs contain important course information:

Lessons: The Lessons tab, located on the left side of the classroom, will contain the following items.

PowerPoint's: The PowerPoint's provide an overview of each chapter.

Resources: The Resources tab, located on the left side of the classroom, will contain the following items:

FSMT340 E-book: You will find the link to your E-book in the Resources folder. The password is apusstudent.

APA 6th Edition Guides: The APA 6th Ed. Writing Style Guide must be used for all written assignments. You do not need to purchase the book as I have provided several APA 6th Ed. resources in the Resources tab.

PowerPoint's: The PowerPoint's provide an overview of each chapter.

Supplemental Web Links: The supplemental web links are links to several websites that will assist you in finding information you will need for your forum questions and your essay assignments. This is not an exhaustive collection of links. There are many websites beyond those in the Supplemental Web Links folder that will aid you in completing your assignments.

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Evaluation Procedures

Grades for this course will be based upon four grading instruments:

1. **Forums (6):** There will be six forum questions that are provided in the Forums which can be found by clicking the Forum tab on the left hand side of the classroom. The student, when directed by the instructor, will respond to the postings of other students. You will not receive a grade until you have responded to the proper number of students or the assignment has closed. Please have your initial post in the forum by Thursday night and your replies posted by Sunday night of the week the Forum assignment is due.

Participation in the forums is mandatory. I have provided a minimum word count for each initial posting and each reply. Your replies must provide more discussion than "good point" or "nice job". Challenge each other, if you disagree then say so and explain why.

2. Essays (2): There are two essays that will be based on your readings and research.

3. **Quizzes:** There are eight quizzes. Their will be one quiz each week of this course and will be based on that weeks readings. All quizzes will consist of 10 multiple choice questions.

4. **Exam:** There will be one exam. The final exam will be a comprehensive exam consisting of 50 multiple choice questions from Chapters 1 - 17.

All due dates are found in the Course Outline below.

All graded items for this course will be based on a 100 point grading scale.

Grade Instruments	Assignment Totals		% of Each Assignment	Total % of Final Grade
Forums	6	X	5%	30%
Essays	2	X	10%	20%
Quizzes	8	X	5%	40%
Final Exam	1	X	10%	10%
Total	17			100%

The total percentage you can earn for this course is 100%.

Each week begins at 12:01 am on Monday and ends at 11:59 pm on Sunday. All assignments must be turned in by the due dates listed below.

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Grading Scale

Please refer to the APUS "Policy" link on the left hand side of the page for more information on this topic.

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Course Outline

8 Neek	Topics	Course Objectives	Readings	Assignments
1	Introduction to	CO-1	Kirks Fire Investigation:	Do all of the following:
	Fire Investigations	CO-2	Chapters 1, 2 and 3	Read the required readings.
	Ū			
	Elementary Chemistry of			Submit Week 1 – Forum 1 Introductions
	Combustion			Submit to the Forum
	Fundamentals			Submit Week 1 – Quiz 1:
	of Fire Behavior			10 question multiple choice quiz on
	and Building			Chapters 1, 2 and 3.

Construction		
		You have 1 hour to complete the quiz.

2	Combustion Properties of	CO-2	Kirks Fire Investigation: Chapters 4 and 5	Do all of the following:
	Liquid and Gaseous Fuels			Read the required readings.
				Submit Week 2 – Forum 2
	Combustion			Submit to the Forum
	Properties of			Submit Week 2 Ouis 2
	Solid Fuels			Submit Week 2 – Quiz 2: 10 question multiple choice quiz on Chapters 4 and 5.
				You have 1 hour to complete the quiz.

3	Sources of Ignition Structure Fires and Their Investigation	CO-2 CO-3	Kirks Fire Investigation: Chapters 6 and 7	Do all of the following: Read the required readings. Submit Week 3 – Forum 3 Submit to the Forum Submit Week 3 – Quiz 3: 10 question multiple choice quiz on Chapters 6 and 7.
				You have 1 hour to complete the quiz.

4	Wild-land Fires and Their Investigation	CO-4	Kirks Fire Investigation: Chapters 8 and 9	Do all of the following: Read the required readings.
	Automobile, Motor Vehicle, and Marine Fires			 Submit Week 4 – Essay 1 See the assignments folder for instructions. Submit Week 4 – Quiz 4: 10 question multiple choice quiz on Chapters 8 and 9. You have 1 hour to complete the quiz.

5	Electrical Causes of Fires	CO-4	Kirks Fire Investigation: Chapters 10 and 11	Do all of the following:
				Read the required readings.
	Clothing and Fabric Fires			Submit Week 5 – Forum 4 Submit to the Forum
				Submit Week 5 – Quiz 5: 10 question multiple choice quiz on Chapters 10 and 11.
				You have 1 hour to complete the quiz.

6	Explosions and	CO-2	Kirks Fire Investigation:	Do all of the following:
	Explosive Combustion	CO-5	Chapters 12 and 13	Read the required readings.

Chemical Fires	Submit Week 6 – Quiz 6:
and Hazardous	10 question multiple choice quiz on
Materials	Chapters 12 and 13.
	You have 1 hour to complete the quiz.

7	Laboratory	CO-6	Kirks Fire Investigation:	Do all of the following:
	Services	CO-7	Chapters 14 and 15	
				Read the required readings.
	Fire-Related			
	Deaths and			Submit Week 7 – Forum 5
	Injuries			Submit to the Forum
				Submit Week 7 – Essay 2
				See the assignments folder for
				instructions.
				Submit Week 7 – Quiz 7:
				10 question multiple choice quiz on
				Chapters 14 and 15.
				You have 1 hour to complete the qui

8	Arson as a Crime Other Investigative Topics	CO-3	Kirks Fire Investigation: Chapters 16 and 17	Do all of the following: Read the required readings. Submit Week 8 – Forum 6 Submit to the Forum Submit Week 8 – Quiz 8: 10 question multiple choice quiz on Chapters 16 and 17. Submit Week 8 – Final Exam: The Final Exam will consist of 50 multiple choice questions from Chapters 1 – 17. You have 2 hours to complete the
				exam.

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Policies

Please see the student handbook or the Policy link in the classroom to reference all University policies.

WRITING EXPECTATIONS

All writing assignments must be submitted in APA format and shall include the following:

- 1. Title Page
- 2. Abstract
- 3. Main Body (With proper in-text citations) to include an Introduction and Conclusion
- 4. Reference Page (Be sure to pay attention to the indentions for each source)

Be sure to include a correct Running Head on each page.

All writing assignments must meet the following page setup:

- 1. Times New Roman font
- 2. 12 Point font size
- 3. Double Spaced
- 4. 1 inch Page Margins: Top, Bottom, Left and Right (Not 1.25 inches)

These instructions must be followed or points will be deducted.

It is your responsibility to ensure your paper is formatted according to APA guidelines.

I have provided all the necessary APA information in the Resources folder.

PLAGIARISM

Please refer to the APUS "Policy" link on the left hand side of the page for more information on this topic.

CITATION AND REFERENCE STYLE

Assignments completed in a narrative essay or composition format must follow the American Psychological Association (APA), 6th edition format.

IMPORTANT: Using improper in-text citations and having an incomplete bibliography will give you a failing grade quicker than anything else. The APA 6th Edition has all the necessary information to ensure that you do this correctly.

DROP/WITHDRAWAL

Please refer to the APUS "Policy" link on the left hand side of the page for more information on this topic.

COURSE EXTENTIONS

Please refer to the APUS "Policy" link on the left hand side of the page for more information on this topic.

LATE ASSIGNMENTS

Your assignments and the due dates can be found in the Syllabus under the Course Outline topic or in the Assignments link on the left hand side of the class page.

The class week begins at 12:01 am on Monday and ends at 11:59 pm on Sunday. All assignment due dates will be by 11:59 pm on Sunday. The initial Discussion Board Postings must be posted by Thursday of the week the assignment is due. This gives the other student's plenty of time to respond to your posting.

Assignments uploaded or posted late will be penalized in the following manner:

- One week late receives 75% credit
- Two weeks late receives 50% credit
- Greater than two weeks receives 0 credits

Course Extensions will not be approved unless assignments are 90% completed and you have not fallen more than three weeks behind. There has been a continuous issue about course extensions in every class in every semester. The professor has the authority to grant an extension and I suggest that each student read the course extension policy in the student handbook available online.

We are very flexible with student's needs and do our best to accommodate our military folks. I understand that mission requirements and austere conditions often don't lend themselves well to the on line environment. It is critical that my military students keep their professors informed up front on pending TDY's or mission-necessary delays.

NETIQUETTE

Online universities promote the advance of knowledge through positive and constructive debate--both inside and outside the classroom. Discussions on the Internet, however, can occasionally degenerate into needless insults and "flaming." Such activity and the loss of good manners are not acceptable in a university setting--basic academic rules of good behavior and proper "Netiquette" must persist. Remember that you are in a place for the fun and excitement of learning that does not include descent to personal attacks, or student attempts to stifle the discussion of others.

- **Technology Limitations:** While you should feel free to explore the full-range of creative composition in your formal papers, keep e-mail layouts simple. The Educator classroom may not fully support MIME or HTML encoded messages, which means that bold face, italics, underlining, and a variety of color-coding or other visual effects will not translate in your e-mail messages.
- Humor Note: Despite the best of intentions, jokes and--especially--satire can easily get lost or taken seriously. If you feel the need for humor, you may wish to add "emoticons" to help alert your readers: ;-), :), :>

DISLCAIMER STATEMENT

Course content may vary from the outline to meet the needs of this particular group.

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Academic Services

The Online Library is available to enrolled students and faculty from inside the electronic campus. This is your starting point for access to online books, subscription periodicals, and Web resources that are designed to support your classes and generally not available through search engines on the open Web. In addition, the Online Library provides access to special learning resources, which the University has contracted to assist with your studies. Questions can be directed to **librarian@apus.edu**.

- **Charles Town Library and Inter Library Loan:** The University maintains a special library with a limited number of supporting volumes, collection of our professors' publication, and services to search and borrow research books and articles from other libraries.
- *Electronic Books:* You can use the online library to uncover and download over 50,000 titles, which have been scanned and made available in electronic format.
- *Electronic Journals:* The University provides access to over 12,000 journals, which are available in electronic form and only through limited subscription services.
- **Tutor.com**: AMU and APU Civilian & Coast Guard students are eligible for 10 free hours of tutoring provided by APUS. <u>Tutor.com</u> connects you with a professional tutor online 24/7 to provide help with assignments, studying, test prep, resume writing, and more. Tutor.com is tutoring the way it was meant to be. You get expert tutoring whenever you need help, and you work one-to-one with your tutor in your online classroom on your specific problem until it is done.
- **Turnitin.com:** Faculty may require assignments be submitted to Turnitin.com. Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. Typically the course professor will establish a Turnitin.com access code for his/her classes. If the code has not been established, those who wish to use Turnitin.com may ask their professor to establish the code.

Request a Library Guide for your course (http://apus.libguides.com/index.php)

The AMU/APU Library Guides provide access to collections of trusted sites on the Open Web and licensed resources on the Deep Web. The following are specially tailored for academic research at APUS:

- Program Portals contain topical and methodological resources to help launch general research in the degree program. To locate, search by department name, or navigate by school.
- Course Lib-Guides narrow the focus to relevant resources for the corresponding course. To locate, search by class code (e.g., SOCI111), or class name.
 If a guide you need is not available yet, please email the APUS Library: librarian@apus.edu.

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Selected Bibliography

Websites (for additional reading, research, and information):

Firefighting News Main Site: http://firefightingnews.com/united-states.cfm **Firehouse Magazine** Main Site: http://www.firehouse.com **National Fire Protection Association** Main Site: http://www.nfpa.org National Fire Sprinkler Association Main Site: http://www.nfsa.org National Institute of Occupational Safety and Health (NIOSH) Main Page: http://www.cdc.gov/niosh/homepage Fire Specific: http://www.cdc.gov/niosh/firehome.html National Institute of Standards and Technology Main Site: http://www.nist.gov Building and Fire Research Library: http://www.brfl.nist.gov **United States Fire Administration** Main Site: http://www.usfa.dhs.gov/ Publications: http://www.usfa.dhs./publications Technical Reports: http://www.usfa.dhs.gov/publications/techreps.cfm **United States Forest Service** Main Site: http://www.fs.fed.us United States House of Representatives Office of the Law Revision Counsel, **United States Code** Main Site: http://uscode.house.gov/ United States National Records and Archives Administration, Government Printing Office, Code of Federal Regulations Main Site: http://www.gpoaccess.gov/cfr/index.html Women in the Fire Service Main Site: http://www.wfsi.org/

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