

ARSON and EXPLOSIVES
Fall 2009

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Office Hours: By Appointment Only

Class: FSC 442

Time: M W 2:00 – 3:15

Place: AKH 107

Required Text: Kirk's Fire Investigation 5th ed.: John D. DeHaan, Ph D

Description: 3 credit hours: Lecture and discussions covering aspects related to the investigation of fires and explosives primarily relating to law enforcement. No prerequisite courses are required although some knowledge of basic science would be helpful.

Drop Date: September 1 to receive 100% refund. September 30 without academic penalty.

Course Communication: Communication with students will primarily be during class lectures. If there are any changes that arise in the syllabus or class schedule between class meetings, each student will be notified of the change via USM email. Therefore, it is a given that each student is expected to have their USM email address activated for this purpose.

Class Procedures and Requirements: Each student is expected to attend all class lectures. Students are expected to be on time for the start of class as to not interrupt or distract the class once the lecture has begun. Cell phones **MUST** be turned **OFF** prior to the start of class. Any cell phone that rings or is being used by a student during a lecture, quiz or exam will be secured and returned to the student after class.

Class Participation: Students should be prepared to participate in class discussions based on assigned readings. Participation in class may help borderline students whose grade is just below the cutoff percentage for the next higher grade. Participation is expected to be professional and on a level commensurate with a college student.

Exams and Quizzes: There will be four exams given during the semester. The exams will account for 80% of your final grade (20% each). There will be a minimum of six quizzes given during the half semester that will account for 20% of your final grade with the lowest quiz score being dropped. **Final Exam Thursday December 10 at 7:00PM** Questions will be a combination of multiple choice and short answer type questions. There will be no essay or True/False questions on exams or quizzes. Each quiz will have a minimum of 15 questions and the first two exams will be a minimum of 33 questions.

Make-up exams are discouraged. However, if a student has a legitimate excuse for missing an exam then a time to take the exam will be arranged at the instructor's convenience. **NO** opportunity to make up a quiz will be given.

Grading Scale: Grading will be done on a 10 point scale where: 90–100 = A; 80– 89 = B; 70–79 = C; 60– 69 = D; <60 = F

Lecture Outline: The lectures will follow the book as written starting with chapter 1. Any deviations will be announced as stated above under "Course Communications".

Lecture Schedule:

Chapter 1 – Introduction

Chapter 2 - The Elementary Chemistry of Combustion

Chapter 3 – The Nature and Behavior of Fire

Chapter 4 – Combustion Properties of Liquids and Gaseous Fuels

Chapter 5 – Combustion Properties of Solid Fuels

Chapter 6 – Sources of Ignition

Chapter 14 – Laboratory Services

Chapter 15 – Fire-Related Deaths and Injuries

Chapter 16 – Arson as a Crime

Chapter 17 – Other Investigative Topics
Origin and Cause

Course Objective: Arson and Explosives is a course designed to demonstrate to students the chemistry of fire and explosions and to familiarize students with the forensic methodologies used for investigations of fires and explosions.

Learning Outcome: Upon completion of this course, students will be able to classify/recognize types of fires and explosive materials. Students will also be able to recognize the analytical methods used to investigate fires and understand whether the methods used are sufficient to withstand judicial scrutiny.

The University's academic honesty policy will be strictly enforced. You are expected to understand the policy which is available in the University Bulletin at the following address:

<http://www.usm.edu/registrar/catalogs2007/undergraduate/pdfs/Student%20Life.pdf>. Plagiarism and/or cheating will not be tolerated. There will be no excuse for lack of familiarity of the Student Code of Conduct in the Student Handbook.

ADA Syllabus Statement

If a student has a disability under the American with Disabilities Act (ADA) and requires accommodations, he/she should contact the Office for Disability Accommodations (ODA) for information on appropriate policies and procedures. Disabilities covered by ADA may include learning, psychiatric, physical disabilities, or chronic health disorders. Students can contact ODA if they are not certain whether a medical condition/disability qualifies.

Address:

The University of Southern Mississippi
Office for Disability Accommodations
118 College Drive #8586
Hattiesburg, MS 39406-0001

Voice Telephone: (601) 266-5024 or (228) 214-3232 Fax: (601) 266-6035

Individuals with hearing impairments can contact ODA using the *Mississippi Relay Service* at 1-800-582-2233 (TTY) or email Suzy Hebert at Suzanne.Hebert@usm.edu.

Academic Honesty Statement

The following is from the USM Undergraduate Bulletin:

“When cheating is discovered, the faculty member may give the student an F on the work involved or in the course. If further disciplinary action is deemed appropriate, the student should be reported to the Dean of Students. In addition to being a violation of academic honesty, cheating violates the Code of Student Conduct and may be grounds for probation, suspension, and/or expulsion.

Students on disciplinary suspension may not enroll in any courses offered by The University of Southern Mississippi.”

Students must send the instructor an e-mail using the course web site e-mail stating that they understand USM's academic honesty policy and also understand that if they do not uphold the standards of academic honesty, the instructor will enforce all applicable punishment.