Syllabus

Fire Technology 105:  FIRE BEHAVIOR AND COMBUSTION PROCESS

Section # 20356

INSTRUCTOR:  Darin B. Hebert                  Drop Deadline = 5/8
                Home  661 297-2265 (Emergency's only)  Drop W/O "W" = 2/21
                Cell  661 803-9423                     Email  hebert.darin@yahoo.com

        Publishing,  Author: Raymond Shackelford
        College of the Canyons Book Store: New book cost - $124, Used book cost - $93 – or Rent

▷ In the subject line of emails, please write FT-105
▷ Email and voicemail will be answered within 24 to 48 hours
▷ Office hours are by appointment only
▷ Log-on at:  http://bb9.canyons.edu

The fire service is a professional organization steep in traditions such as personal pride, honesty and integrity. It has
very little tolerance for anyone not striving for the same excellence. Each chapter will have various amounts of
learning objectives that will help the student absorb information that normally would be lost.

HOW TO GET STARTED:

1. Use the instructions I sent to all the students by email.
2. Read the entire Syllabus
3. Go to the discussion board and complete the first discussion by **02/10**
4. Make sure you reply to two of your classmate’s discussion board answers.
   a. This is to be done on every discussion board.
5. Go to the Course Assignments, make sure you complete the assignments, complete the discussion boards by the
due date.
6. Go to the Course Calendar, review the calendar for assignments and due date.
7. Go through the entire site - make sure you don't miss anything.
8. What is not there today, may be there tomorrow.
9. Make sure you check-in to the site at least every other day.
10. Any questions, feel free to contact me by phone or email.
11. Good luck!

COURSE ANNOUNCEMENTS:

The course announcements page is the first page you open once you log into Blackboard. This page must be
reviewed every time you enter Blackboard. The Announcements page will have permanent announcements that need
to be reviewed "every once in awhile", and new announcements that are very important for updates, quiz
announcements, changes in the course, and in completing the course
OBJECTIVES:

Why Study "Fire Behavior and Combustion"

Understanding how fire works is important to controlling wildfire and using fire as a management tool. The California Department of Forestry, the Los Angeles County Fire Department, and the Los Angeles City Fire Department promote the study of fire science, including fire behavior and the effect of fire on the environment. The information gained from this study is used to develop new techniques, computer models and tools that improve forest fire management decision-making, safety, and efficiency.

The manner in which fuels ignite, flames develop and wildfire spreads is collectively referred to as fire behavior. Fire managers require a working knowledge of certain universal, scientific principles applicable to all spreading fires, which are based in physics and the chemistry of combustion.

For a fire to exist and spread it has four fundamental needs -- fuel, oxygen, heat and a chemical reaction -- which fire managers refer to as the fire tetrahedron. The fire tetrahedron demonstrates that oxygen, fuel, heat and a chemical chain reaction in proper proportions are all required to create a fire. In the absence of any one of these factors, fire cannot start or exist. We use this knowledge to prevent and suppress structure and forest fires. By removing or weakening any one of the sides of the fire tetrahedron, we can reduce the intensity of, or eliminate the fire altogether.

The author of "Fire Behavior and Combustion Processes," the book we are using in this class, has designed it to provide a straight-forward yet comprehensive resource for students enrolled in fire science degree programs, or as a refresher for active firefighters.

This class will review the entire book. There will also be PowerPoint Presentations that you will need to review. Fire Behavior and Combustion is not an easy course, where that you just read the material and know everything there is to know about the course. You will need to get out of the house, stretch your legs and go to a Fire Station, talk to a Station Officer, or Firefighters.

Standard Learning Objectives (SLO's):

1. Identify theories of fire behavior and combustion.
2. Define classifications of fire and associated methods of extinguishment.
3. Describe materials as they relate to fire fuels and the combustion process.
4. Define the terms and concepts associated with the chemistry and dynamics of fire.

"Study as if your life depends on it." It may one day save your life, your buddies life, or the life of a loved one.
WHAT'S DIFFERENT?

Instead of fighting traffic and racing to class, you will access information and share your learning through or Web site, at the time and place of your choosing (within certain limits). Since you will need to check the Web site regularly, you should bookmark it:  http://bb9.canyons.edu

Instead of dislocating your shoulder because you raise your hand in class so often and so enthusiastically, you will contribute to class discussion by posting your musings on our discussion boards. Because no one will know you're attending class if you don't "say" anything, your active participation is crucial.

Instead of skulking across campus in fear of encountering your instructor after you skip class, you will be able to ignore the whole course just by not turning on your computer. Remember that while an online course offers you great flexibility, it also presents a great challenge to your self-discipline.

TECHNOLOGY:

Technology requirements for the course are basic. You must have an email address, regular access to the Internet, a web browser (e.g., Internet Explorer or Netscape Navigator), and a word-processing program such as Microsoft Word. At least a 56Kbps modem is recommended.

I assume that you possess basic computer literacy and comfort in using the Internet. Specifically, you should be able to compose documents using a word processing program, copy and paste text, use a web browser, use email, and send and open documents as attachments.

If you'd like to evaluate your readiness to participate in an online course, see the self-assessment survey; Are you ready to learn? Go to:

http://www.canyons.edu/Offices/SSSP/Pages/default.aspx

ASSESSMENT:

Participants will be evaluated based on attendance, participation, and timely completion of a final project.

Attendance

There is no more mandatory face-to-face day on campus. There may or may not be any online class projects during the semester. If there are any, students will be notified prior to scheduling one. If due to extenuating circumstances, you must miss one of the online class projects, you will be required to complete a make-up assignment. If you miss more than one of these online class projects, you will not pass this course.
Participation

Much of your course work will involve participation on a class-wide discussion board, participation on a smaller group discussion board, self-assessment surveys (quizzes), and the facilitators, and a final individual project.

More specifically, you should contribute substantively to each unit. Details of what constitutes, "substantial" participation are noted on the discussion board forums. If you do not complete the postings in a timely manner, you will not pass the course.

CLASSROOM CONDUCT:

Standards of speech that obtain in a traditional classroom also apply to the discussion board and email communications.

OUR CLASSROOM:

You will find our classroom at: http://bb9.canyons.edu

Blackboard is the course management system (CMS) adopted by College of the Canyons. The Blackboard environment should become quickly familiar to you. It's important that you thoroughly explore the site's various features. Have fun! Look around, and keep in mind that you can't break anything in the online classroom.

If you find aspects of the websites features interesting or confusing, please post a message about it at the Technology Help discussion board Forum -- that way others in the class can offer their replies as well as myself.

FINAL PROJECT:

The Final Project will consist of an individual comprehensive report on an incident of your choice. ie: Any large scale incident that occurred any time during the year. It shall be a typewritten report, using at least a 12pt font, utilizing Times New Roman or Arial. The project shall have a separate title page, a minimum of five pages of typewritten material, and a separate bibliography page at the end of the report. The project will be graded on subject matter, grammar, spelling and originality. There is absolutely no allowance for plagiarism, or cutting and pasting of internet material. This shall be a college level report, "typed" and if needed, email me and I will explain more. When you complete this project, please email it to me as an attachment.

THIS REPORT IS MANDATORY TO PASS THE COURSE.

The Final Project is due by midnight, Tuesday May 31st. Please go to the Course Calendar and Course Assignments pages for more information on the completion of this project.