Upon completion of this course, students should:

1. Identify physical properties of the three states of matter.
2. Categorize the components of fire.
3. Recall the physical and chemical properties of fire.
4. Describe and apply the process of burning.
5. Define and use basic terms and concepts associated with the  chemistry and dynamics of fire.
6. Describe the dynamics of fire.
7. Discuss various materials and their relationship to fires as fuel.
8. Demonstrate knowledge of the characteristics of water as a fire  suppression agent.
9. Articulate other suppression agents and strategies.
10. Compare other methods and techniques of fire extinguishments.

**Course Learning Outcomes:** Upon completion of the course, the student will be able to:

*   Write a technical report that presents the laboratory background, results and acceptable conclusions
*   Independently research issues related to fire behavior and combustion
*   Utilize industry standard software and equipment for fire tests