

**Wallenpaupack Area School District
Planned Course Curriculum Guide**

Department

Name of Course

Course Description:

Initial Creation Date (if applicable) and Revision Dates:

Wallenpaupack Area School District Curriculum	
COURSE: Protective Services Level 3 Fire	GRADE/S: 12
UNIT 1: Chemistry and Physics of Fire	TIMEFRAME: 5 days

<p>PA COMMON CORE/NATIONAL STANDARDS:</p> <p>Firefighters need an understanding of fire and its behavior. They need to understand and anticipate fire conditions that may change rapidly as well as affecting tactics and strategies used to mitigate emergencies caused by fire.</p>
<p>UNIT OBJECTIVES (SWBATS):</p> <p>The student will be able to:</p> <ol style="list-style-type: none"> 1. Describe the stages of fire 2. Explain the process of combustion 3. Identify the methods of heat transfer 4. Differentiate the physical states of matter in which fuels are commonly found
<p>INSTRUCTIONAL STRATEGIES/ACTIVITIES:</p> <p>Students demonstrate how the fire triangle is directly related to non-flaming/smoldering fires, and how the 4th component of the fire tetrahedron (chemical chain reaction) is directly related to extinguishing fires in a flaming mode. This may be done in an extinguisher demonstration controlled and monitored by the local fire department, using appropriate extinguishers to extinguish a smoldering fire and a flaming fire.</p>
<p>ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):</p> <p>Chemistry of Fire Quiz and Key Discussion Rubric Summary Rubric</p>
<p>DIFFERENTIATED INSTRUCTION (Acceleration/Enrichment):</p> <p>Students compare and contrast the similarities and differences between a fire triangle and a fire tetrahedron, then write a summary. This may also be done by building two- and three-dimensional models to show the different components.</p>
<p>RESOURCES (Technology Based Resources, Text Resources, etc.):</p> <p>Chemistry and Physics of Fire Quiz and Key Computer/projector Internet access College and career planning guides (career cruising) Firefighter professional journals and magazines</p>
<p>KEY VOCABULARY:</p> <p>Key Terms:</p>