

40 Hour Chemistry of Hazardous Materials

Course Description:

Chemistry of Hazardous Materials covers principles of basic chemistry and the chemical properties that make materials hazardous. Assuming no prior knowledge of basic chemistry, the text is equally useful as a teaching tool for the non-science major and an on-the-job resource for the emergency responder. With a simplified, streamlined layout, the 7th edition includes an introduction to the latest technologies, additional challenging exercises, and a discussion of current events to offer context for ways of interpreting, handling, and storing hazardous chemical substances.

Course Material: Chemistry of Hazardous Materials, 7th Edition; 2020

Course Objectives:

- Introduction; Features of Matter and Energy; Flammable Gases and Liquids;
- Chemical Forms of Matter; Principles of Chemical Reactions;
- Use of the DOT Hazardous Materials Regulations by Emergency Responders;
- Chemistry of Some Common Elements; Chemistry of Some Corrosive Materials
- Chemistry of Some Water- and Air-Reactive Substances;
- Chemistry of Some Toxic Substances; Chemistry of Some Oxidizers;
- Chemistry of Some Hazardous Organic Compounds: Part I;
- Chemistry of Some Hazardous Organic Compounds: Part II;
- Chemistry of Some Polymeric Materials; Chemistry of Some Explosives;
- Radioactive Materials

Who should attend?

- All public sector emergency service responders with hazardous material responsibilities;
- All private sector emergency service responders with hazardous material responsibilities;
- Administrators, supervisors, and security personnel of hazardous material facilities.

Earned Credentials:

Upon successful completion of the course, participants will earn 40 Continuing Education Units (CEUs) and a certificate verifying successful course completion.