THE UNIVERSITY OF AKRON College of

Course Outline

VII. Chemistry of Some Hazardous Organic Compounds

- A. The Nature of Organic Compounds
- B. Aliphatic Hydrocarbons C. Aromatic Hydrocarbons
- D. Functional Groups
- E. Halogenated Hydrocarbons
- F. Alcohols
- G. Ethers
- H. Aldehydes and Ketones I. Organic Acids
- J. Esters
- K. Amines
- L. Peroxo-Organic Compounds

VIII. Chemistry of Some Corrosive Materials A. The Nature of Acids and Bases

- B. The PH Scale
- C. Acids and Bases as Corrosive Materials
- D. Sulfuric Acid
- E. Nitric Acid
- F. Hydrochloric Acid
- G. Perchloric Acid
- H. Hydrofluoric Acid
- I. Phosphoric Acid
- J. Acetic Acid
- K. Alkaline Metal Hydroxides
- L. Response to Corrosive Material Emergencies

IX. Chemistry of Some Water-Reactive Materials A. The Nature of Water Reactive Materials

- B. Alkali Metals
- C. Combustible Metals
- D. Metallic Hydrides
- E. Metallic Phosphides
- F. Metallic Carbides
- X. U.S. Department of Transportation Hazard Classes and Their Divisions
 A. Identification of Hazardous Materials by Container Shape and Size
 B. Identification of Hazardous Materials by Transportation 1 1953(y)14bID 22>> BDC BT 1 0 0rc

C. Identification of Hazardous Materials by NFPA 704 System D. Identification of Hazardous Materials by Material Safety Data Sheets (MSDS)

XII. Response Guidelines

- A. Utilization of North American Emergency Response Guidebook
- B. Utilization of NIOSH Pocket Guide to Chemical Hazards
- C. Utilization of NFPA Fire Protection Guide to Hazardous Materials
- D. Utilization of Bureau of Explosives Emergency Action Guides

Special accommodations:

If there are special circumstances which affect your learning in this class, please let me know as soon as possible. Accommodations can be arranged through the Office of Accessibility, located in Simmons Hall 105 (x7928).