

# Chemistry

## **CHEM S-1ab. General Chemistry (CRN: 30877)**

*James E. Davis PhD, Senior Lecturer on Chemistry and Chemical Biology and on Molecular and Cellular Biology, Emeritus, Harvard University*

This is a comprehensive survey of chemistry for the general student. Emphasis will be placed on the principles underlying the formation and interaction of chemical substances: stoichiometry, states of matter, thermochemistry, atomic and molecular structure, intermolecular forces, solutions, thermodynamics, kinetics, chemical equilibrium, acids and bases, electrochemistry, and environmental chemistry. This course fulfills the requirement of two semesters of inorganic chemistry for entrance to medical school.

## **CHEM S-20ab. Organic Chemistry (CRN: 30609)**

*Garry Procter DPhil, Director of Undergraduate Laboratories, Department of Chemistry and Chemical Biology, Harvard University, George Ramage Professor of Organic Chemistry, University of Salford*

This course is an intensive, comprehensive introduction to the chemistry of carbon and its importance to biological molecules. Topics will include current ideas of bonding and structure, major reaction mechanisms and pathways, a discussion of the analytical tools used to determine the structure and stereochemistry of organic compounds (such as infrared and NMR spectroscopy), and some of the chemistry of amino acids, peptides, carbohydrates, and nucleic acids. This course fulfills the requirement of two semesters of organic chemistry for entrance to medical school.