

A6768 THE CONSERVATION OF ARCHITECTURAL METALS

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COURSE DESCRIPTION

This seminar reviews the structural and decorative uses of metals in buildings and monuments. The metals to be reviewed include iron and steel; copper and copper alloys including bronze and brass; lead; tin; zinc; aluminum; nickel and chromium. The seminar will examine the history of manufacture and use; mechanisms of deterioration and corrosion; and cleaning, repair, and conservation.

COURSE REQUIREMENTS

As a course assignment, participants will:

1. Individually prepare an annotated bibliography on any aspect of architectural metals (history, manufacture, use, or conservation) **OR**
2. Work alone or in a small group to prepare a metals walking tour of a NYC neighborhood

COURSE OUTLINE

- Week 1. 8 September. Introduction to metals: nature and manufacture, deterioration and corrosion processes; the electromotive series; methods of protection; corrosion terminology.
- Week 2. 15 September. Iron and steel; history of manufacture and use.
- Week 3. 22 September. Iron and steel; deterioration and conservation.
Field Trip: Wrought and cast iron at Bethesda Terrace, and a boat ride under the Bow Bridge. Friday, September 26th (depending upon weather and host availability)
- Week 4. 29 September. Zinc, Lead, and Tin.
Field Trip: V&S Hot Dip Galvanizing, Friday, October 3rd.
(Bus ride, lunch and 600,000 pounds of molten zinc! You'll remember this day.)
- Week 5. 6 October. Copper and Copper Alloys
- Week 6. 13 October. Nickel, Chromium, Aluminum. Course review.

Additional field trip if your busy schedules permit:

Nickel silver, stainless steel and aluminum: "GE" Building, the International Building, and (if we're lucky) the Top of the Rock.