

The San Diego Chapter of



Presents **Metallurgy for the Non-Metallurgist™**

San Diego Chapter Price : \$700.00 ASM Members & Employees of Chapter Sponsors: \$600.00

** 50% off the normal Online-Only price of \$1,400.00 through ASM International*

Continuing Education Units: 3.0 IACET units (based on passing final on-line exam).

The program includes electronic access to downloadable (PDF) chapters and online final exam, combined with in-person classroom instruction by knowledgeable metallurgists and materials scientists. Classes will be held on four consecutive Tuesdays in October, with dinner provided starting at 5:30 pm and classroom instruction beginning at 6:00 pm.

COURSE OVERVIEW

- Presents a brief history of metals.
- Provides an explanation of the unique physical characteristics of metals.
- Explains the basis for the selection of different metals for specific applications.
- Describes how and why metals are alloyed to achieve desired properties.
- Details on one of the most important of all alloys, *steel*, and discusses how steel is heat-treated to achieve various combinations of strength and ductility.
- Learn how metals are formed into components that are used in our engineered machines and structures.
- How metals are tested to determine properties, such as strength, ductility and toughness.
- Discusses why metals corrode, why different metals behave differently in corrosive environments, and how the corrosion of metals can be controlled.

WHAT YOU'LL LEARN

- How metals are recovered from nature and processed into usable forms
- The characteristics of different metal alloy systems
- A basic understanding of phase diagrams
- Factors that affect selection of the proper material
- Mechanical properties and various testing methods
- How the properties of metals can be altered through heat treatment
- Introduction to mechanisms of corrosion

WHO WOULD BENEFIT FROM THE CLASS

This is an ideal first course for anyone who needs a working understanding of metals and their applications. It has been designed for those with no previous training in metallurgy, such as technical, laboratory, and sales personnel; engineers from other disciplines; management and administrative staff; and non-technical support staff such as purchasing and receiving agents who order and inspect incoming material.

For more information

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