CLASS 5 LESSON PLAN

Building-wide Concerns

Overview

This module introduces students to ways in which environmental factors (including temperature, humidity, light, and air quality) contribute to material deterioration. Methods and best practices for monitoring these environmental factors will be reviewed, and problems caused by pests and mold will be highlighted. Finally, the relationship between good building design and preservation of materials will be discussed.

The lesson is divided into three parts:

Part I: Environmental Effects on Cultural Heritage Collections. In the first portion of the lesson, students will learn about four key environmental factors —temperature, humidity, light, and air quality/pollution—and how they contribute to the deterioration of cultural heritage materials held in libraries, archives, and other types of cultural institutions. Currently suggested standard levels of these factors and best practices in controlling them are detailed.

Part II: Monitoring the Environment. In the second hour, the methods, guidelines, and equipment used to monitor the environment will be highlighted. A special focus should be placed on the havoc caused by biological challenges such as pests and mold. Discussion includes the preferred and safest methods of identification, monitoring, and control of pests in collections, and information on how to identify and eradicate mold outbreaks.

Part III: Building Design and Environmental Systems. The final section of this class will focus on building design and environmental systems that can promote the best preservation conditions in cultural heritage institutions. Special attention will be given to understanding heating, ventilation, and air-conditioning (HVAC) and lighting systems. The susceptibility of collections to damage during building construction and renovation projects is also mentioned. Policies for security of general and special library collections will be reviewed, and current security systems described. Case studies of library theft can be reviewed to let students think about ways to combat future security compromises or theft. Finally, systems for the detection and suppression of smoke and fire damage will be described.