TBSI 2686

Division: Career and Technical Education
Department: Traditional Building Skills Institute
Course: TBSI 2686
Title: Traditional Adobe Restoration
Catalog Description:

This course is a hands-on workshop for the traditional building skills of adobe restoration. The course covers the history, philosophy, and traditional practices for the repair, manufacture, and construction of historic adobe projects.

General Education Requirements: N/A
Semesters Offered: Fall
Credit/Time Requirement: Credit: 1.5; Lecture: 1; Lab: 1
Clock/Hour Requirements: 0
Offered for Non-Credit: No
Prerequisites: None

Justification:

The course is provided in response to construction industry trends for rehabilitating existing adobe buildings, as well as increased interest in historic adobe preservation. Adobe has also been used in contemporary construction.Sanpete County and Utah have a significant number of historic resources and settings that can provide the laboratory experience for the course.This course is required for the AAS degree in Traditional Building Skills as recommended by Traditional Building Skills Institute Board of Trustees.

Student Learning Outcomes:

Upon successful completion of this course, students will:

- know the philosophy of adobe restoration and the use of adobe in contemporary construction
- be able to manufacture adobe bricks and install adobe masonry
- be able to survey adobe deterioration, assess its causes, and develop a restoration plan
- will appreciate the cultural and historical aspects of adobe architecture by lecture and slides.

Content:

This course will include:

- introduction

        - history
            - earth architecture and use
            - different types of earth construction around the world
            - contemporary use of adobe
        - philosophy
            - preservation practice
            - adobe as a material and its deterioration, physical, and mechanical properties
- adobe construction techniques
    - soil source and selection
    - mixing proportions and additives
    - molds for bricks
    - drying, curing, and handling
- adobe wall construction techniques
    - wall design
    - construction of openings
    - reinforcing consideration
    - analysis of insulation--thermal mass effect
    - interior and exterior surface coatings
- adobe deterioration
    - survey and record conditions
    - determine the nature of the deterioration
    - identify and correct the source of deterioration
    - develop restoration plans that are sensitive to the integrity of the adobe building

General Education Outcomes:

5) Apply a cultural and historical awareness to a variety of phenomena.

Building with adobe has been used for centuries and is still a viable building material today. This will be shown to the participants through slides and lecture. Students will demonstrate cultural appreciation of adobe building through actual restoration projects.

Key Performance Indicators:

The following percentages are approximate:

- adobe building skills will be assessed in consultation with the instructor(s): (50%)
- quiz will be given on the content: (30%)
- 10 points per day will be given for attendance and promptness, and 10 points per day will be given for willingness to participate and follow instructions: (20%)

The course and instructors will be assessed by the students on a prepared evaluation sheet. (This evaluation indicates the value of the course and ways in which to improve it.)

Representative Text and/or Supplies:

- U.S. Department of the Interior, Preservation Brief #5 "Preservation of Historic Adobe Buildings".

Optimum Class Size: 10
Maximum Class Size: 15

Signatures:

I hereby submit this course syllabus:

_____

, ,

I hereby find this course consistent with the goals and resources of the Traditional Building Skills Institute Department:

_____

Woodruff Challis, , , Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

_____

Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

_____

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

_____

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)