



BCCM 2701

Division: Career and Technical Education

Department: Building Construction and Construction Management

Course: BCCM 2701

Title: Building Assessment

Catalog Description:

This course provides an introduction to and overview of building assessment procedures used in current historic preservation practice. Methods used to assess and rehabilitate building materials using traditional building skills and craft will be investigated.

General Education Requirements: N/A

Semesters Offered: Spring

Credit/Time Requirement: Credit: 3; Lecture: 3; Lab: 0

Clock/Hour Requirements: 90

Offered for Non-Credit: No

Justification:

The preservation and restoration of existing historic buildings involves a diverse array of assessment procedures which interact across the spectrum of contemporary construction technology. Some assessment procedures use contemporary investigation tools and products while others use time tested approaches. In either event, the practice of building assessment in historic buildings is continually evolving and needs to be introduced to the student entering the field. BCCM 2701 provides an introduction to these approaches that comply with the Secretary of the Interior's Standards which dictate the compliance criteria mandated for appropriate construction practices that retain and preserve historic materials and constructed assemblies. BCCM 2701 provides the foundation for documenting, evaluating, and planning the rehabilitation and/or restoration of historic buildings by introducing the student to historic building materials and technologies, the Secretary of Interior's Standards for Historic Preservation, economic incentives for preservation, and general approaches to the rehabilitation of historic buildings. BCCM 2701 will provide the foundational approaches to assessing the conditions found in the built environment and advising on preservation/restoration practices used to return the historic materials and assemblies to a restored condition. It also will serve as the corequisite for BCCM 2702 (Special Projects). Only a handful of Associate Degree programs offered in the United States offer this type of course instruction and they are located in the east. This course, tailored to the historic construction methods common to Utah and other western United States, will be the first in the intermountain west.

Student Learning Outcomes:

Upon successful completion of this course, students will:

- learn the foundation for documenting, evaluating and planning the rehabilitation and/or restoration of

historic buildings

- know the overall assessment procedures that drive what are considered to be appropriate preservation/restoration practices
- be able to understand and provide feedback on what potential repairs or restoration practices will most appropriately retain the existing historic materials existing in accordance with the Secretary of the Interior's Standards for renovation and rehabilitation of historic buildings
- build upon the underlying concepts devised from the corequisite courses to then be able to move into site investigation and assessment on their own accord.

Content:

BCCM 2701 covers the assessment and documentation of this historically representative selection of the materials and construction methods that were used in developing and constructing historic buildings common to the intermountain west and beyond. These assessment and documentation practices will include (but not be limited to) the following applications:

- building inspection and documentation
- meet modern code and performance demands
- procedures for planning a rehabilitation project
- mechanics of producing an historic structures report
- role of the Secretary of Interior's Standards for Historic Preservation
- evolution of building technology in the United States from the late 17th century to the mid-20th century
- process of identifying, rehabilitation and/or maintaining materials commonly found in historic buildings
- restoration techniques in common use today
- environmental safety issues related to the rehabilitation of buildings
- the affect of codes on the operation and maintenance of historic properties
- resources available for preservation/rehabilitation planning activities.

General Education Outcomes:

1) Read effectively, constructively, and critically.

Students read a variety of publications and are quizzed on their basic content. Discussion questions are designed to elicit more constructive and critical responses (e.g., What are the defects in the construction and what is causing them? "What restoration/preservation approach more appropriate than another?" "Can the construction method originally used be replicated in the contemporary construction field and if not, what alternative measures can be taken to replicate them?").

2) Write clearly, informatively, and persuasively.

Each student will write at least one essay that demonstrates their approach to making an assessment and describes the potential range of valid and appropriate restoration/preservation strategies available. Each essay will be returned with suggestions for improving the student's writing skills.

3) Speak effectively in a variety of contexts.

Each student will be asked to interact with the class to describe the assessment process and their recommended preservation/restoration strategy approach. Interaction may be as an oral presentation or as a leadership role in a discussion group.

- 4) Retrieve, evaluate, interpret, and deliver information through a variety of traditional and electronic media.

Due to the evolving nature of the historic preservation industries, students will learn how to not only retrieve information on assessing traditional building materials from published written resources but also to use electronic media to gather contemporary case studies or examples of current preservation assessment and remediation practices in action. This information will be used to formulate oral discussion and complete written assignments

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

Quizzes, essays, examinations, and class discussions will all ask students to consider the readings from a variety of resources to establish the differences between modern construction approaches and historic traditional building practices and how to assess and remediate the conditions of historic materials found in the built environment.

- 9) Respond with informed sensitivity to an artistic work or experience.

An important goal of the course is to foster an appreciation of traditional building methods and the materials used to complete them. Students will be challenged to recognize and understand the methods of the specific construction practice or craft available today and to encourage the most appropriate approaches to assess and remediate defects in historic materials.

Key Performance Indicators:

- 5-10 quizzes (short answers): 20% of the final grade
- 1-2 examinations (short essays): 40%-60% of the final grade
- 1-2 essays (5-7 pages each): 20%-40% of the final grade

Representative Text and/or Supplies:

- Rex Cauldwell, *Inspecting a House*, 2000, Taunton Press.
- George Nash, *Renovating Houses: Bringing New Life to Vintage Homes*, 2003, Taunton Press.
- Donald Friedman, *The Investigation of Buildings: A Guide for Architects, Engineers, and Owners*, 2000, W. W. Norton.
- *National Park Service Preservation Briefs Series* (42 separate topic areas).

Optimum Class Size: 10

Maximum Class Size: 15

Signatures:

I hereby submit this course syllabus:

Officer Robert Wright, ,

I hereby find this course consistent with the goals and resources of the Building Construction and Construction Management Department:

Marlin Christensen, M. Ed., Instructor, 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)