Department:

Building Trades

Course Description:

This course is a study of the reinforcing materials, concrete, and basic formwork used in construction. The course will cover how to perform several masonry and concrete finishing tasks, such as mixing concrete, building footings, edges and wall forms, and using concrete reinforcing materials.

Course Competencies:

Upon completion of the course, the student should be able to:

1. Identify the properties of cement.
2. Describe the composition of concrete.
3. Perform volume estimates for concrete quantity requirements.
4. Identify types of concrete reinforcement materials and explain their uses.
5. Identify various types of footings and explain their uses.
6. Explain the safety procedures associated with the construction and use of concrete forms.
7. Erect, plumb, and brace a simple concrete form with reinforcement.

Course Content:

A. Concrete and Concrete Materials
B. Concrete Mix Proportions and Measurements
C. Special Types of Concrete
D. Curing Methods and Materials
E. Concrete Slump Testing
F. Estimating Concrete Volume
G. Concrete Reinforcement Materials
H. Concrete Forms

Learning Assessments:

Course competencies will be assessed by participation in class discussion and activities, examinations, assignments, and class attendance.

Instructional Materials:

Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students must complete the “Disabilities Self-Identification Form” at this link: https://highlandcc.edu/pages/disability-services.

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.