

# Virginia Western Community College

## CIV 135

### Construction Management and Estimating

#### Prerequisites

None

#### Course Description

Teaches the equipment and methods used in construction. Includes principles and economics of construction, planning and management, and principles of estimating primarily using highway and building project examples.

**Semester Credits: 3 Lecture Hours: 3 Lab/Recitation Hours:** Select Hours

#### Required Materials

##### **Textbook:**

Management of Construction Projects, 1<sup>st</sup> ed., Author: Schaufelberger Pearson - ISBN: 9780130846785

##### **Other Required Materials:**

Calculator

Access to Excel (or other spreadsheet software)

#### Course Outcomes

**At the completion of this course, the student should be able to:**



- Understand the comprehensive assessment of construction project management issues
- Identify and create important project management documents
- Understand and create a standard contract and subcontract documents that are used extensively in private sector
- Develop an estimate to bid a project

### **Topical Description**

<b>Week</b>	<b>Topic</b>
1	Introduction & Construction Contracts
2	Selecting a Project, Cost Estimating
3	Planning and Scheduling
4	Contract Development
5	Partnering and Team Building, Subcontracting
6	Material Management
7	Project Start-Up
8	Document and Record Keeping
9	Communications, Field Questions
10	Submittals
11	Progress Payments, Cost and Time Control
12	Quality Management, Safety Management
13	Contract Change Orders
14	Claims and Disputes
15	Project Close-Out, Warranty Management
16	Final Exam

### **Notes to Instructors**

1. All instructors teaching this course will use the same textbook.
2. Course content within this course may be covered at the instructor's discretion but with all topics being understood.
3. This course and its grades will be structured around a minimum of a midterm exam, final exam, and homework.



4. At the end of the semester, all instructors will give the outcome assessment as it relates to the final exam to the program head at the same time they prepare their student final grades.
5. The final exam will include only the material covered after the midterm exam, which must be at least 10% of the final grade.

