

**Common Course Outline**  
**CONT 121**  
**Construction Estimating**  
**3 Semester Hours**

**The Community College of Baltimore County**

**Description**

**Construction Estimating**

Includes the study of preliminary, detailed, and quantity estimates as currently practiced in the industry; discusses interrelationship of plans, specifications, and the contract. 3 credits: 3 lecture hours per week.

Prerequisite: CONT 106 or equivalent experience. Offered spring semester only

**Overall Course Objectives**

Upon completion of this course the student will be able to:

Calculate math problems as required by the industry

Identify and use formulas for areas and volumes as required for estimating

Customize unit (database) cost to suit job conditions when given plans, specifications, and a site visit

Identify the standard units of measurement for various building materials

Read and calculate measurements using an architectural and engineering scale

Verify, at a glance, that the numbers punched into a calculator or keyboard are correct

Illustrate the importance of an accurate estimate in the formulation of a good and profitable contract

Document the take-off lines as to location and drawing reference

**Major Topics**

Estimating principals and procedures

Estimating cycle

Type of estimates

Errors in estimating  
Estimating mathematics  
General conditions  
Cost factors  
Site visit  
Excavation  
Concrete work  
Masonry  
Metals  
Wood construction  
Thermal/moisture  
Doors/ Windows  
Finishes  
Electrical  
Plumbing / HVAC

### **Course Requirements**

Grading/exams: Grading procedures will be determined by the individual faculty member and will include at least 4 out of the 7 categories that follow:

Homework  
Projects  
Mid term  
Sample estimate  
Term paper/oral report  
Classwork  
Team projects  
Quizzes  
Final exam

There will be a minimum of 8 graded assignments.

Writing: The individual faculty member will determine specific writing assignments.

### **Other Course Information**

This course is a     X     core course and a \_\_\_\_\_ elective.

This course is taught in a computerized environment. YES

This course is the first course in a required two-course sequence.

Individual faculty members may include additional course objectives, major topics, and other course requirements to the minimum expectations stated in the Common Course Outline.

Date Revised: 08/29/00