

## **CONT 101**

### **Construction Blueprint Reading**

3 Credits

## Community College of Baltimore County Common Course Outline

### **Description**

**CONT 101 – Construction Blueprint Reading:** introduces orthographic projection, terminology, dimensioning, symbols, working to scales, schedules, material lists and details, pictorial representation, and basic parallel projection drafting techniques. The diverse areas requiring the reading and/or interpretation of blueprints related to the construction industry are reviewed. An introduction of how to interpret electrical and electronic schematics is provided.

### **Overall Course Objectives**

Upon completion of this course, students will be able to:

1. explain the critical nature of the use of blueprints in commercial and residential construction;
2. recognize the separate disciplines that are integrated to produce a set of buildable plans;
3. measure dimensions with regard to plumbing, HVAC, structural and electrical building systems;
4. interpret basic architectural symbols with regard to plumbing, HVAC, structural and electrical building systems;
5. apply basic units of measurement of materials and dimensions needed for construction;
6. perform basic math functions needed for construction;
7. identify the materials needed to construct a building from a set of plans;
8. demonstrate knowledge of the basic architectural views (plan, elevation, and section);
9. contrast the differences between rendering and orthographic drawings;
10. explain the various components and interconnections of electronic and electrical systems when given a schematic; and
11. interpret a variety of construction prints and schematics related to building foundations, framing, plumbing, mechanical, electrical, electronics, masonry, and HVAC.

### **Major Topics**

- I. Construction drawings
- II. Reading measuring tools
- III. Mathematics review
- IV. Lines and symbols
- V. Freehand technical sketching
- VI. Pictorial drawings
- VII. Orthographic drawings
- VIII. Dimensions

The Common Course Outline (CCO) determines the essential nature of each course.  
For more information, see your professor's syllabus.

- IX. Construction materials
- X. Specifications
- XI. Plot plans
- XII. Foundation prints
- XIII. Commercial framing prints
- XIV. Residential framing prints
- XV. Plumbing prints
- XVI. HVAC prints
- XVII. Masonry prints
- XVIII. Electronic and electrical schematics

### **Course Requirements**

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- Five homework assignments
- One mid-term Exam
- One final Exam
- Five quizzes

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