# COURSE SYLLABUS

**Course Title:** Blueprint Reading  
**Department:** Business & Technology Department  
**Curriculum:** Energy Management Program  
**Date submitted:** Spring, 2016 (AAC: 16-28)

**Course Code:** (eg. ACC 101) CTC*106  
**Course Type:**  
- A: Clinical  
- B: Lab  
- D: Distance Learning  
- I: Individual/Independent  
- L: Lecture  
- N: Internship  
- M: Seminar  
- P: Practicum  
- U: Studio  
- X: Combined Lecture/Lab  
- Y: Combined Lecture/Clinical/Lab  
- Z: Combined Lecture/Studio

**Course Descriptors:** Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.

**Elective Type:** G  
AH: Art History  
E: English  
FA: Fine Arts  
G: General  
HI: History  
HU: Humanities  
LAS: Liberal Arts & Sciences  
FL: Foreign Language  
M: Math  
S: Science  
SS: Social Science

**Credit Hours:** 3  
**Developmental:** (yes/no) No  
**Lecture:** 1.5  
**Clinical:** 0  
**Lab:** 1.5  
**Studio:** 0  
**Other:** 0  
**TOTAL:** 3  
**Class Maximum:** 24  
**Semesters Offered:** Sp

**Catalog Course Description:** Provides the fundamentals of blueprint reading for estimating and construction. Topics include construction methods, construction math, lines and symbols, abbreviations, notations, using architectural and engineering scales, dimensioning, basic sketching and various types of plans – site, architectural, mechanical, electrical, plumbing, structural, and shop drawings and specifications.

**Prerequisites:**  
- C- or better in Integrated Reading & Writing II (ENG*075) or Introduction to College Reading & Writing (ENG*075) or Introduction to (ESL*162) or placement into Composition (ENG*101) AND  
- C- or better in Prealgebra & Elementary Algebra (MAT*085) or Introductory Algebra (MAT*094) or Elementary Algebra Foundations (MAT*095) OR placement into credit level mathematics. or appropriate placement test score

**Corequisites:** None

**Other Requirements:** None

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<table>
<thead>
<tr>
<th>Week 1:</th>
<th>Introduction to Course/Types of Drawings</th>
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<tr>
<td>Week 2:</td>
<td>Construction Drawing Organization/Uses of Drawings</td>
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<td>Week 3:</td>
<td>Construction Math</td>
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<td>Week 4:</td>
<td>Reading Measuring Tools &amp; Using Scales</td>
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<td>Week 5:</td>
<td>Lines and Symbols/Fundamental Drawing Practices</td>
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<td>Week 6:</td>
<td>Specifications and Building Codes</td>
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<td>Week 7:</td>
<td>Construction Materials</td>
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<td>Week 8:</td>
<td>Site Plans</td>
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<td>Week 10:</td>
<td>Architectural Drawings/Foundation Prints</td>
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<td>Week 11:</td>
<td>Structural Drawings/Framing Drawings</td>
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<td>Week 12:</td>
<td>Advanced Project A/Electrical Drawings</td>
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<td>Week 13:</td>
<td>Plumbing Prints/Advanced Project B</td>
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<td>Week 14:</td>
<td>HVAC Prints/Advanced Project B</td>
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<td>Week 15:</td>
<td>Estimating/Advanced Project C</td>
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Upon successful completion of this course, the student will be able to do the following:

- explain the use and utility of all types of construction drawings
- interpret all types of construction drawings.
- classify construction phases and specifications
- dimension lines using Architects’ scales
- prepare an estimate of materials needed from plans

**PROGRAM:** (Numbering reflects Program Outcomes as they appear in the college catalog)

1. read and analyze building blue prints including floor, mechanical, and electrical plans
2. demonstrate the ability to use problem-solving techniques & mathematics to transform concepts into energy related projects

**GENERAL EDUCATION:** (Numbering reflects General Education Outcomes as they appear in the college catalog)

2. Critical Analysis/ Logical Thinking - Students will be able to organize, interpret, and evaluate evidence and ideas within and across disciplines; draw reasoned inferences and defensible conclusions; and solve problems and make decisions based on analytical processes.

   **Demonstrates:** Identifies the issue(s); formulates an argument; explains and analyzes relationships clearly; draws reasonable inferences and conclusions that are logical and defensible; provides support by evaluating credible sources of evidence necessary to justify conclusions.

   **Does Not Demonstrate:** Identifies few or no issues; formulates an argument without significant focus; provides an unclear explanation of analysis and relationships; drawing few reasonable inferences and conclusions that are illogical and indefensible; provides little to no support using credible sources of evidence necessary to justify conclusions.

**Evaluation:**

Assessment will be based on the following criteria:

- Class Participation .....................20%
- Homework Assignments & Quizzes ..........40%
- Final Projects & Exam ......................40%

100%
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<tr>
<th>Instructional Resources:</th>
<th>Required: NONE</th>
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<tbody>
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<td>Desired: NONE</td>
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| Textbook(s)             | Required Text: *Print Reading for Construction – 6th Edition*  
|                         | Walter C. Brown and Daniel P. Dorfmueller  
|                         | ISBN: 978-1-60525-802-7 |