COURSE SYLLABUS

Tunxis Community College

Education That Works For a Lifetime

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

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

Course Code: (eg. ACC 101)	CTC*106
Course Type:	X

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

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
Contact Hours: Lecture:	1.5
Clinical:	0
Lab:	1.5
Studio	0
Other:	0
TOTAL:	3
Class Maximum:	24
Semesters Offered:	Sp

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

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.

Topical Outline: List course content in outline format.	Week 1: Introduction to Course/Types of Drawings Week 2: Construction Drawing Organization/Uses of Drawings Week 3: Construction Math Week 4: Reading Measuring Tools & Using Scales Week 5: Lines and Symbols/Fundamental Drawing Practices Week 6: Specifications and Building Codes Week 7: Construction Materials Week 8: Site Plans Week 10: Architectural Drawings/Foundation Prints Week 11: Structural Drawings/Framing Drawings Week 12: Advanced Project A/Electrical Drawings Week 13: Plumbing Prints/Advanced Project B Week 14: HVAC Prints/Advanced Project B Week 15: Estimating/Advanced Project C
Outcomes: Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.	**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 interferences 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: List how the above outcomes will be assessed.	**Assessment will be based on the following criteria:** Class Participation……..…20% Homework Assignments & Quizzes……..40% Final Projects & Exam ……..…40% 100%

Instructional Resources: List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.	**Required: NONE** **Desired: NONE**
Textbook(s)	**Required Text:** Print Reading for Construction – 6th Edition Walter C. Brown and Daniel P. Dorfmueller 2013, The Goodheart-Willcox Company, Inc. ISBN: 978-1-60525-802-7