

## Master Syllabus

### CAT 1101 - Architectural Drafting

**Division:** Science, Mathematics and Engineering

**Department:** Civil Engineering Technology

**Credit Hour Total:** 3.0

**Lecture Hrs:** 2.0 **Lab Hrs:** 2.0

**Date Revised:** January 2015

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### Course Description:

Develop proficiency with computer drafting techniques, developing architectural drawings and coordinating a set of construction documents. Includes developing 3D visualization and architectural problem solving skills. Two classroom, two lab hours per week.

### General Education Outcomes:

- ▣ Critical Thinking/Problem Solving
- ▣ Values/Citizenship/Community
- ▣ Information Literacy
- ▣ Computer Literacy
- ▣ Oral Communication
- ▣ Written Communication

### Course Outcomes:

#### Residential building code knowledge

Review current local residential building codes and apply to residential architectural designs to determine code compliance.

**Assessment Method:** Locally developed exams

**Performance Criteria:** Individual student score of 70% correct or better

**Assessment Method:** Portfolios

**Performance Criteria:** Individual student score of 70% of available points or better

#### Manual drafting

Prepare architectural drawings using manual techniques, demonstrating proper layout, line quality, lettering and other drafting techniques to properly describe a new residence.

**Assessment Method:** Portfolios

**Performance Criteria:** Individual student score of 70% of available points or better

#### Components, materials and methods

Research and collect data on typical building components, materials and methods of assembly in typical residential construction. Utilize collected data to inform portfolios.

**Assessment Method:** Portfolios

**Performance Criteria:** Individual student score of 70% of available points or better

#### Computer drafting

Prepare architectural drawings using computer aided drafting techniques, demonstrating proper layout, line quality, lettering and other CAD techniques to properly describe a new residence.

**Assessment Method:** Portfolios

**Performance Criteria:** Individual student score of 70% of available points or better

#### Architectural exploration

Research an architect or architectural topic and prepare a written report and visual presentation of findings.

**Assessment Method:** Portfolios

**Performance Criteria:** Individual student score of 70% of available points or better

#### 3-dimensional visualization

Develop 3-dimensional visualization skills to distinguish proper documentation requirements for solving architectural problems.

**Assessment Method:** Locally developed exams

**Performance Criteria:** Individual student score of 70% correct or better

### Outline:

Basic construction technology as related to drafting requirements  
Proper use of manual drafting equipment  
Proper use of computer drafting software and equipment  
3D visualization  
Architectural drafting and layout  
Construction document set content requirements  
Environmental responsibility and material selection