Sinclair Community College
444 E. Third St.
Dayton, OH 45402

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

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 Competency
- Values/Citizenship/Community Competency
- Information Literacy Competency
- Computer Literacy Competency
- Oral Communication Competency
- Written Communication Competency

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 avaialble 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 requirementsProper use of manual drafting equipmentProper use of computer drafting software and equipment3D visualizationArchitectural drafting and layoutConstruction document set content requirementsEnvironmental responsibility and material selection