ARCH 2005: Residential CAD Studio

A. COURSE DESCRIPTION

Credits: 4
Lecture Hours/Week: 1
Lab Hours/Week: 6
OJT Hours/Week: *.*

Prerequisites:
This course requires both of these prerequisites
   ARCH 1000 - Residential Construction
   ARCH 1052 - Architectural CAD II

Corequisites: None
MnTC Goals: None

This course covers creating residential construction drawings used by a residential building contractor to obtain bids and building permits using computer-aided design (CAD) software. Topics covered include analyzing home design, implementing wood framing technology, complying with residential building codes, and CAD drafting skills. (Prerequisites: ARCH 1000 and ARCH 1052) (1 credit lecture/3 credits lab)

B. COURSE EFFECTIVE DATES: 05/18/2013 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Factors for residential design
2. Residential building codes
3. Industry standards for residential construction drawings
4. Residential drafting CAD standards

D. LEARNING OUTCOMES (General)

1. Select a home design to meet project parameters.
2. Calculate house floor plan dimensions.
3. Select code compliant doors and windows.
4. Create structural wood framing analysis.
5. Calculate stair riser to meet code.
6. Apply zoning requirements to house site plan.
7. Design industry standard residential floor plans.
8. Draft industry standard residential section details and elevations.
9. Produce plotting drawing to proper scale

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus
G. SPECIAL INFORMATION

None noted