METHODS AND MATERIALS I — ARCT 1020

A. Course Description
   - Credits: 3.00
   - Lecture Hours/Week: 3.00
   - Lab Hours/Week: 0.00
   - OJT Hours/Week: 0
   - Prerequisites: None
   - Corequisites: None
   - MnTC Goals: None

This course will introduce the beginning architectural technology student to the properties and applications of common, as well as new and sustainable residential building materials. This class will cover materials and methods such as: current sustainable practices in home building, wood stud construction, window installation, roofing, foundations, flashing, etc. These materials and construction methods then be applied in the Studio I projects.

B. Course Effective Dates: 8/27/12 – Present

C. Outline of Major Content Areas
   - As noted on course syllabus

D. Learning Outcomes
   1. Compare properties of various metals
   2. Compare the various types of flashing materials
   3. Compare the various types of floor and wall tiles
   4. Compare the various types of gypsum wall boards
   5. Compare the various types of interior wood stains
   6. Compare various types of siding
   7. Define masonry
   8. Describe door types
   9. Describe properties of glass and glazing
   10. Describe sizes of dimension lumber
   11. Describe the various types of air and vapor barriers
   12. Describe types of insulation
   13. Describe various interior finish materials
14. Describe various types of protective coatings
15. Describe various types of roofing
16. Describe waterstops
17. Describe window types
18. Explain brick veneer construction
19. Explain conventional use of plywood
20. Explain conventional use of softwoods and hardwoods
21. Explain dampproofing and waterproofing
22. State physical makeup of concrete
23. State the minimum required R-values for residential structures
24. Utilize industry terminology related to thermal and moisture protection

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

F. Learner Outcomes Assessment

   As noted on course syllabus

G. Special Information

   None noted