

# Dakota County Technical College

## IDES 1121: Critical Thinking and Programming

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 3

Lab Hours/Week: 1

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course introduces students to the critical thinking skills used in the design process of interior spaces. Cultural anthropology, anthropometrics, universal design, and ergonomics will be studied. Students will synthesize these factors to generate strategic layouts for interior environments. The initial phases of the design process - programming (gathering project information) and schematic design (develop preliminary concepts) will be explored.

**B. COURSE EFFECTIVE DATES:** 08/27/2012 - Present

**C. OUTLINE OF MAJOR CONTENT AREAS**

#### **D. LEARNING OUTCOMES (General)**

1. Assess client expectations
2. Assess project requirements
3. Assess standards development
4. Complete a commercial space plan
5. Complete a residential space plan
6. Define and generate block diagrams
7. Define and generate bubble diagram
8. Define and generate criteria matrix
9. Define cost estimates
10. Define interior design
11. Define proxemics
12. Define quantitative project requirements
13. Define stacking diagrams
14. Define support areas
15. Develop and demonstrate problem solving skills
16. Develop observation skills
17. Develop schematic space plan
18. Discuss surveys and interviews
19. Examine adjacency requirements
20. Examine and practice Programming
21. Examine and use ADA (Americans with Disabilities Act) requirements
22. Examine planning flexibility
23. Examine theory of SAFE (simple, appropriate, functional and economical) design
24. Identify and practice brainstorming
25. Identify circulation factors
26. Identify human factor requirements
27. Identify specialty consultants
28. Identify the phases of the design process
29. Research human anthropometrics
30. Research personal space
31. Research territoriality

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

None

#### **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

#### **G. SPECIAL INFORMATION**

None noted