OUTCOMES BASED LEARNING MATRIX

Course: Graphic Communication with CAD Department: Architectural Technology

Course Description: Use of digital drawing tools to create effective presentations of an assortment of technical and non-technical information. Graphic presentation emphasizing scale, proportion, and aesthetic quality is practiced. Fundamental skills required for operation of all CAD oriented software programs are developed.

Approved by Department:

Date:

While completing the table below, remember that the individual outcomes you list in the first column should answer this question: **What must the learner know and be able to do at the end of the course?** Items in the third column should answer the question: **How do we know?** The second column is where teachers can be most creative; it's for pedagogy. Each rectangle in column one should contain just one outcome; the corresponding rectangles in columns two and three, however, may contain more than one item. Using the code at the end of the matrix, indicate the core competencies being strengthened by the outcomes activities and the assessment tools.

*COURSE OUTCOMES	OUTCOMES ACTIVITIES	ASSESSMENT TOOLS
The student shall be able to set up a new CAD drawing including appropriate drawing parameters.	Listen to lecture with examples of drawing setup options; follow text examples; CT, TS, QS	In class lab exercises; instructor evaluation of student drawing; CT, TS, QS
The student shall be able to select a drawing template appropriate to the drawing to be produced.	Listen to lecture with presentation of example drawing templates and reference to drawing size standards; CT, TS, QS	Instructor assessment of in-class laboratory assignments; CT, TS, QS
The student shall be able to set text size and style appropriate to the scale and size of drawing to be produced.	Listen to lecture on selection of text size and style and it's relation to drawing size and scale; use of single and multi-line text; CT, TS, QS	In class lab exercises; instructor evaluation of student drawing; CT, TS, QS

The student shall be able to draw line work using both absolute and relative Cartesian or polar coordinates.	Instructor lecture and demonstration of drawing techniques; follow text examples; CT, TS	In class lab exercises; instructor evaluation of student drawing; CT, TS
The student shall be able to draw circles, arcs and ellipse objects using a variety of parametric sets.	Instructor lecture and demonstration of drawing techniques; follow text examples; CT, TS	In class lab exercises; instructor evaluation of student drawing; CT, TS
The student shall be able to modify drawing objects using a variety of tools such as move, rotate, copy, trim, extend, offset.	Instructor lecture and demonstration of drawing techniques; follow text examples; CT, TS	In class lab exercises; instructor evaluation of student drawing; CT, TS
The student shall be able to create rectangular and polar arrays and mirror images.	Instructor lecture and demonstration of drawing techniques; follow text examples; CT, TS, QS	In class lab exercises; instructor evaluation of student drawing; CT, TS, QS
The student shall be able to select appropriate dimension styles and set dimensioning parameters.	Listen to lecture on selection of dimension size and style and it's relation to drawing size and scale; CT, TS, QS	In class lab exercises; instructor evaluation of student drawing; CT, TS, QS
The student shall be able to produce a final drawing product presenting the assigned technical subject in an acceptable standardized format.	Class discussion of how to incorporate the learned techniques to production of a final product or deliverable; class assignment of a project subject and scope of work; CT, TS, QS	Instructor evaluation of student drawing for completeness, technical accuracy, organization, overall style and aesthetic quality; CT, TS, QS
The student shall be able to develop a graphic presentation combining data sets with graphic symbols and elements to achieve visual interest	Listen to lecture describing various options for graphic presentation of data; class discussion of use of graphic symbols in lieu of verbiage; CT, TS, QS	Instructor in-class review of student progress in developing a graphic presentation assignment; monitor progress at intermediate stages; CT, TS, QS
The student shall be able to present his/her graphic project to peers and demonstrate how the exhibit communicates the key elements in a visually interesting & effective manner	Instructor serves as catalyst for in-class discussion and peer critique of student presentations; CT, TS, QS, OC	Instructor and peer assessment of graphic presentation effectiveness; CT, TS, QS, OC

*Try to express an outcome as an infinitive phrase that concludes this sentence: **At the end of the course, the students should be able to . . ..** Finding the line between too general and too specific can be difficult. In an English Composition course, for instance, it is probably too general to say, "The student should be able to write effective essays." It is probably too specific to say, "The student should be able to write an introductory paragraph of at least 50 words, containing an attention-getting device, an announcement of the narrowed topic, and an explicit thesis sentence." Just right might read, "The student will write introductions that gather attention and focus the essay."

**Indicate the Core Competencies that apply to the outcomes activities and assessment tools: Critical Thinking (CT); technology skills (TS); oral communications (OC); quantitative skills (QS); reading (R); writing (w).